

# HELMINTHOLOGICAL ABSTRACTS

*incorporating*

BIBLIOGRAPHY OF HELMINTHOLOGY

For the Year 1938.



IMPERIAL BUREAU OF AGRICULTURAL PARASITOLOGY  
(HELMINTHOLOGY)

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FOR THE YEAR 1938.

Vol. VII, Part 5.

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## 456—Acta Medica. Rio de Janeiro.

- \*a. CRUZ, W. O., 1938.—“Os nossos conhecimentos atuais sobre a ancilostomose.” 1, 495-498.

## 457—Acta Medica Scandinavica.

- a. NORDENSON, N. G., SEGERDAHL, E., STRANDELL, B. & WALLMAN-CARLSSON, C., 1938.—“Die Frequenz und geographische Verbreitung der perniziösen Anämie in Schweden.” 97 (3/4), 222-236.

(457a) Nordenson and his co-workers find that 17 male and 29 female cases of *Bothriocephalus* anaemia were reported in Sweden in the years 1931-35, mostly from the coastal district of Norrbatten. The actual incidence is probably much higher. B.G.P.

## 458—Agricultural Progress.

- a. TAYLOR, E. L., 1938.—“Internal parasites of poultry and their association with disease.” 15 (2), 94-100.

(458a) After reviewing the factors which influence the development of heavy infestations of helminths and coccidia in poultry, Taylor points out the differences between the mechanism of the development of epidemics of bacterial diseases on the one hand and helminthic and protozoal diseases on the other. Prevention in the case of the latter depends on the formulation of special hygienic measures which will result from a fuller understanding of the reactions of the free-living stages of the parasites in the environment of the host. D.O.M.

## 459—Algérie Médicale.

- \*a. DUMOLARD et al., 1938.—“Au sujet de la pathologie des kystes hydatiques calcifiés.” 42, 206-208.  
\*b. BLONDEAU, A., LAUPRETRE & MIRAMOND DE LA ROQUETTE, 1938.—“Kyste hydatique du coeur. Particularités de l'image radiologique.” 42, 299-301.  
\*c. COSTANTINI & LE GÉNISSEL, 1938.—“À propos de l' 'image de décollement' du kyste hydatique du poumon.” 42, 361-370.  
\*d. LEVI-VALENSI, A., 1938.—“Kyste hydatique et tuberculose pulmonaire.” 42, 515-527.

\* Original not available for checking or abstracting.



## 460—Állattani Közlemények.

- a. SOÓS, Á., 1938.—“A magyarországi tőzegmoha-lápok fonalférgeiről I.” 35 (1/2), 61-83. [In Hungarian : German summary pp. 79-83.]

(460a) Soós records 25 species of nematodes from Hungarian peat bogs. Two species, *Rhabditis uliginosa* and *Diplogaster sphagni*, are new to science ; these have been described in Zool. Anz., 122, 218-286 [see Helm. Abs., Vol. VII, No. 442a].

A.E.F.

## 461—American Journal of Clinical Pathology.

- a. WILLIAMS, O. O., 1938.—“Disseminated echinococcosis.” 8 (4), 442-450.

## 462—American Midland Naturalist.

- a. MUELLER, J. F., 1938.—“Additional species of North American Gyrodactyl-idea (Trematoda).” 19 (1), 220-235.  
 b. CABLE, R. M., 1938.—“Studies on larval trematodes from Kentucky with a summary of known related species.” 19 (2), 440-464.  
 c. MIZELLE, J. D., 1938.—“New species of monogenetic flukes from Illinois fishes.” 19 (2), 465-470.  
 d. STEELMAN, G. M., 1938.—“A description of *Phyllodistomum caudatum* n. sp.” 19 (3), 613-616.  
 e. HUBBARD, W. E., 1938.—“A remarkable infection of tapeworm larvae in a whip-snake.” 19 (3), 617-618.  
 f. STEEN, E. B., 1938.—“Two new species of *Phyllodistomum* (Trematoda : Gorgoderidae) from Indiana fishes.” 20 (1), 201-210.  
 g. MIZELLE, J. D. & HUGHES, R. C., 1938.—“The North American freshwater Tetraonchinae.” 20 (2), 341-353.  
 h. ERICKSON, A. B., 1938.—“Parasites of some Minnesota Cricetidae and Zapodidae, and a host catalogue of helminth parasites of native American mice.” 20 (3), 575-589.  
 i. BONHAM, K. & GUBERLET, J. E., 1938.—“Ectoparasitic trematodes of Puget Sound fishes. *Acanthocotyle*.” 20 (3), 590-602.  
 j. SEAMSTER, A., 1938.—“Studies on gill trematodes from Oklahoma fishes.” 20 (3), 603-612.  
 k. STEELMAN, G. M., 1938.—“A description of *Cercaria raiacauda* n. sp.” 20 (3), 613-618.

(462b) Cable describes *Cercaria kentuckiensis*, *C. ornatostoma*, *C. trichoderma*, *C. vogeli*, all from the snail *Goniobasis semicarinata*, and assigns them places in Sewell's classification of cercariae.

E.M.S.

(462c) Mizelle describes *Actinocleidus longus* n. sp., *Cleidodiscus diversus* n. sp., *Onchocleidus cyanellus* n. sp. from the gills of *Apomotis cyanellus*, *Urocleidus umbraensis* n. sp. from *Fundulus notatus*, and *Dactylogyrus atromaculatus* n. sp. from *Semotilus atromaculatus*.

E.M.S.

(462d) Steelman describes *Phyllodistomum caudatum* n. sp. from the urinary bladder of *Ameiurus melas*. The species is most like *P. carolini* but the eggs are larger and the body has a tail-like posterior appendage.

E.M.S.

(462e) Hubbard found over 1,000 plerocercoids encysted in the connective tissues of *Coluber flagellum flavigularis*, kept without food for

5 months. Some of the larvae possess an invaginated scolex with 4 suckers. A kitten fed with 100 of the larvae failed to show an infection after 30 days.

E.M.S.

(462f) Steen describes *Phyllodistomum undulans* n. sp. from the urinary bladder of *Cottus bairdi*, characterized by 3 pairs of marginal folds, and *P. brevicecum* n. sp. from *Umbra limi*, whose most conspicuous character is the shortness of the intestinal caeca.

E.M.S.

(462g) Reviewing the North American fresh-water Tetraonchinae (Dactylogyridae), Mizelle & Hughes reduce the group thus restricted to the 5 genera: *Tetraonchus*, *Murraytrema*, *Actinocleidus*, *Cleidodiscus* and *Urocleidus*. They give dichotomous keys to the genera and species, with notes on synonyms and hosts.

B.G.P.

(462h) Ninety-one specimens of 5 species of native American mice trapped in Minnesota gave 12 helminth species of which the following are recorded as new, viz., *Subulura unguatus* n. sp. and *Spiruracerca zapi* n. g., n. sp. from the jumping mouse, *Zapus hudsonius hudsonius*; *Syphacia samorodini* n. sp. from *Peromyscus leucopus noveboracensis* and *P. maniculatus*; *Prochoanotaenia peromysci* n. sp. and *Aspiculuris americana* n. sp. from *P. maniculatus gracilis*.

R.T.L.

(462i) Benham & Guberlet redescribe as new species *Acanthocotyle pacifica* Guberlet, 1936 from the body surface of 3 species of *Raja*, and *A. pugetensis* Guberlet, 1936 from the gill filaments of *Raja binoculata*. [See also Helm. Abs., Vol. V, No. 423a.]

E.M.S.

#### 463—American Museum Novitates.

- a. NIGRELLI, R. F., 1938.—“Parasites of the swordfish *Xiphias gladius* Linnaeus.” No. 996, 16 pp.

(463a) Nigrelli reviews the literature on the parasites of the sword-fish, *Xiphias gladius*, and describes 5 species of helminths from this host collected by the Lerner-Cape Breton Expedition in 1936. These are: *Dibothrium plicatum*, *Dibothriorhynchus attenuatus*, *Tentacularia coryphaena*, *Contracaecum incurvum* and *Nybelinia lamontei* n. sp.

A.E.F.

#### 464—Anales de la Escuela Nacional de Ciencias Biologicas.

- a. AGUIRRE PEQUEÑO, E., 1938.—“Contribución al conocimiento de la echinococcosis del hombre en Angangueo, Mich.” 1 (1), 155-159.

#### 465—Anales de la Facultad de Medicina de Montevideo.

- \*a. PIAGGIO-BLANCO, R. A., ROGLIA, J. L. & URIOSTE, B., 1938.—“Síndrome icteroascítico con esplenomegalia por obstrucción hidática del colédoco.” 23, 844-852.
- \*b. PIAGGIO-BLANCO, R. A. & AGORIO, E., 1938.—“La exclusión tardía de la vesícula biliar consecutiva al tratamiento quirúrgico del quiste hidatídico del hígado.” 23, 853-861.
- \*c. CHIFFLET, A. & MUSSO, R., 1938.—“El desprendimiento de la adventicia en los quistes hidáticos operados del hígado.” 23, 950-957.
- \*d. RAGO, M., 1938.—“Distocia por quiste hidático pelviano.” 23, 1025-1030.

\* Original not available for checking or abstracting.



## 466—Anales del Instituto de Biología.

- a. CABALLERO y C., E. & BRAVO HOLLIS, M., 1938.—“Nemátodos de los ajolotes de México. I.” 9 (3/4), 279-287.  
b. CABALLERO y C., E. & PEREGRINA, D. I., 1938.—“Nemátodos de los mamíferos de México. I.” 9 (3/4), 289-306.

(466a) Caballero & Bravo Hollis redescribe *Spironoura elongata* (Baird, 1858) and *Hedruris siredonis* Baird, 1858 from *Ambystoma tigrinum*. Special attention is drawn to the variability of the genital papillae. R.T.L.

(466b) The helminth fauna of Mexico is very similar to that of South America. Fifteen common nematode species are recorded. *Dirofilaria repens*, *Dipetalonema gracile* and *Physaloptera macillaris* are described in some detail. R.T.L.

## 467—Annales d'Anatomie Pathologique.

- a. CURTILLET, E. & HUGUENIN, A., 1938.—“Une curieuse vésicule hydatique. Échinococcose bronchique secondaire.” 15 (9), 1072-1074.

## 468—Annales de la Faculté Française de Médecine et de Pharmacie de Beyrouth.

- \*a. MILLISCHER, P., 1938.—“Importance de l'enseignement de la bactériologie, de la parasitologie et de l'immunologie dans les pays du Proche Orient.” 7, 1-16.

## 469—Annales de Médecine.

- a. LUTEMBACHER, R., 1938.—“Kyste hydatique en involution et syndrome ventriculaire droit.” 44 (5), 455-458.

## 470—Annales de Médecine Vétérinaire.

- a. HUYGHENS, F. & LEFÈVRE, A., 1938.—“La bronchite vermineuse.” 83, 145-156.

(470a) This paper summarizes briefly the known facts on the pathology, prophylaxis and treatment of verminous bronchitis. R.T.L.

## 471—Annales d'Oculistique.

- a. GABRIÉLIDÈS, C. A., 1938.—“Filaire dans la chambre antérieure de l'oeil.” 175 (8), 581-589.

(471a) Gabriélidès found a filarial worm in the anterior chamber of the eye of a Greek, causing serious eye-troubles, irido-cyclitis, secondary glaucoma and blindness. The worm, apparently a female, measured 32 mm. long by 1 to 2 mm. in breadth. J.J.C.B.

\* Original not available for checking or abstracting.

## 472—Annales de la Société Royale Zoologique de Belgique.

- a. LESTAGE, J. A., 1938.—“Notes de limnobiologie. XV. Un nouveau nématode belge : l'ichtyoparasite *Raphidascaris acus* Blochm.” Année 1937, 68, 91-94.
- b. LESTAGE, J. A., 1938.—“Notes de limnobiologie. XVI. Un nouvel acanthocéphale belge : *Echinorhynchus truttae* Schrk.” Année 1937, 68, 95-101.

## 473—Annals of the New York Academy of Sciences.

- \*a. VENARD, C. E., 1938.—“Morphology, bionomics, and taxonomy of the cestode *Dipylidium caninum*.” 37, 273-328.

## 474—Annotationes Zoologicae Japonenses.

- a. HARADA, I., 1938.—“Acanthocephalen aus Formosa (I).” 17 (3/4), 419-427.
- b. YAMASHITA, J., 1938.—“*Clinostomum complanatum*, a trematode parasite new to man.” 17 (3/4), 563-566.
- c. FUKUI, T. & MORISITA, T., 1938.—“Notes on the acanthocephalan fauna of Japan.” 17 (3/4), 567-576.
- d. OGATA, T., 1938.—“Contribution à la connaissance de la faune helminthologique coréenne. I. Une nouvelle espèce de trématodes provenant de chauves-souris.” 17 (3/4), 581-586.
- e. RAHM, P. G., 1938.—“Freilebende und saprophytische Nematoden der Insel Hainan. (Mit besonderer Berücksichtigung der bisher bekannt gewordenen Nematoden Nordchinas und Japans).” 17 (3/4), 646-667.

(474a) A new genus *Micracanthocephalus* is erected for *Micracanthorhynchus motomurai* Harada, 1935 and systematic descriptions are given of the following acanthocephala: *Micracanthocephalus dakusuiensis* n. sp. and *Eosentis formosanus* n. sp. in *Zacco temmincki*; *Rhadinorhynchus nudus* n. sp. in *Trachurus japonicus*; *Filisoma microcanthi* n. sp. in *Microcanthus strigatus*. A new genus *Spiracanthorhynchus* is suggested for *Spirorhynchus alemniscus* Harada, and Harada's *Spirorhynchidae* is given subfamily rank as *Spiracanthorhynchinae* n. subfam. (Echinorhynchidae). R.T.L.

(474b) Of this parasite, hitherto reported only from birds, a single specimen was removed from the pharynx of a woman in Osaka. R.T.L.

(474c) The 42 species of Japanese acanthocephala hitherto recorded are listed. Descriptions and notes of some are added. R.T.L.

(474d) *Plagiorchis koreanus* n. sp. is described from the small intestine of *Nyctalus aviator* at Heijo, Korea. It closely resembles *P. noblei* Park, 1936. R.T.L.

(474e) Thirty-five species are described, including *Mononchus vorax* n. sp., *Stephanium lingulatum* n. g., n. sp., *Anguillulina (Tylenchus) incisa* n. sp. and *Aphelenchus hainanensis* n. sp. R.T.L.

\* Original not available for checking or abstracting.



## 475—Archiv für Geflügelkunde.

- a. HEPDING, L., 1938.—“Umfang und Ergebnisse der Geflügeluntersuchungen in Preussen in den Jahren 1935 und 1936.” 12, 129-149. [English summary.]

(475a) Hepding considers the incidence of poultry diseases in Prussia in the years 1935 to 1936. Intestinal worms are among the causes which bring about mortality, for he has found them in large quantities in the crop, intestine and caeca. Species of *Prosthogonimus* have been recovered from the oviduct, and *Syngamus trachea* frequently occurs and causes death. P.A.C.

## 476—Archiv für Hydrobiologie und Planktonkunde.

- a. STEFAŃSKI, W., 1938.—“Les nématodes libres des lacs des Tatra Polonaises, leur distribution et systématique.” 33, 585-687.

(476a) Stefański gives an account of the nematode fauna of the lakes of the Polish Tatra region. These belong to two main groups: (i) oligotrophic lakes, (ii) dystrophic lakes. The fauna of these differs and the author discusses the factors affecting the numbers, the species and their distribution, and finally deals with the systematics of the worms collected. T.G.

## 477—Archiv für Klinische Chirurgie.

- \*a. ANDRÄ, K., 1938.—“Appendicitis oxyurica.” 192, 618-630.  
b. MÁTYÁS, M., 1938.—“Echinococcus des Ovars und des Netzes bei einer vor 6 Jahren wegen Carcinoma ventriculi magenresezierten Frau.” 192, 631-644.

## 478—Archiv für Verdauungs-Krankheiten, Stoffwechselpathologie und Diätetik.

- a. ASKANAZY, M., 1938.—“Une appendicite vermineuse existe-t-elle?” 63 (3), 113-129.

## 479—Archives d'Électricité Médicale. Paris.

- \*a. BROU, R., JAUBERT DE BEAUJEU, A. & SLIM, M., 1938.—“Maladie hydatique. Echinococcose secondaire de la plèvre.” 46, 222-224.

## 480—Archives de l'Institut Pasteur d'Algérie.

- a. LESOURD, M., 1938.—“La bilharziose d'après les croyances des indigènes de Djanet.” 16 (4), 588-591.

(480a) Lesourd states that, before the identification of urinary schistosomiasis in Algeria, the native people confused it with gonorrhoea. He gives native names for the disease, and methods of treatment formerly applied. B.G.P.

## 481—Archives des Maladies de l'Appareil Digestif et des Maladies de la Nutrition.

- a. ZAMFIR, D. & STROESCO, V., 1938.—“Considérations sur un cas de cysticercose musculo-cutanée généralisée.” 28 (7), 748-754.

\* Original not available for checking or abstracting.



**482—Archives des Maladies Professionnelles.**

- \*a. DOUBROW, S., 1938.—“ L'ankylostomose en pathologie du travail.” 1 (4), 298-305.

**483—Archives de Médecine Générale et Coloniale.**

- a. ROSANOFF, G., 1938.—“ Sur une forme déroutante de parasitose intestinale.” 7 (6), 219-221.

**484—Archives Médico-Chirurgicales de l'Appareil Respiratoire.**

- a. MONOD, R., KOURILSKY, R. & SOBERANO, R., 1938.—“ Contribution à l'étude des kystes hydatiques pulmonaires ouverts dans les bronches.” 13 (5), 362-391.  
b. COSTANTINI, THIODET & CURTILLET, 1938.—“ Un cas de kyste hydatique du foie rompu dans la plèvre et le poumon.” 13 (5), 392-398.  
c. PRUVOST, P., GRENET & DELORE, 1938.—“ A propos de deux aspects radiologiques de pneumo-kystes hydatiques du poumon.” 13 (5), 399-411.

**485—Archives of Ophthalmology.**

- a. JONES, L. T., JORDAN, L. W. & SULLIVAN, N. P., 1938.—“ Intraocular nematode worms : report of a case and review of the literature.” 20 (6), 1006-1012.

**486—Archivio Italiano di Chirurgia.**

- a. CASSUTO, A., 1938.—“ Bilharziosi vescicale.” 48 (6), 745-757.

**487—Archivio Italiano di Medicina Sperimentale.**

- a. GAETANI, G. F. DE, 1938.—“ L'eosinofilia da elminti : rassegna sintetica.” 2, 567-592.

**488—Archivio di Radiologia.**

- \*a. GUIDOTTI, C., 1938.—“ Su di un caso di cisti d'echinococco della colonna vertebrale di difficile interpretazione radiologica.” 14, 304-308.

**489—Archivos Argentinos de Pediatría.**

- \*a. VALDES, J. M. & PIANTONI, C., 1938.—“ Quiste hidatídico de pulmón en la infancia ; contribución al estudio clínico-radiológico.” 9, 457-488.

**490—Archivos Uruguayos de Medicina, Cirugía y Especialidades.**

- a. PURRIEL, P. & CHIFFLET, A., 1938.—“ La intermitencia en el signo del casquete claro.” 13 (2), 147-154.

**491—Archiwum Hydrobiologii i Rybactwa.**

- a. MILICER, W., 1938.—“ Über die parasitischen Würmer aus den Fischen des Wigry-Sees.” 11 (1/2), 96-117.

\* Original not available for checking or abstracting.

## 492—Arquivos de Cirurgia Clinica e Experimental.

- \*a. TIBIRIÇÁ, P. Q. T., 1938.—“Concomitância do lymphogranuloma venereo e da schistosomose nas rectites estenosantes.” 2, 62-68.

## 493—Arquivos do Instituto Biologico.

- a. REIS, J. & NOBREGA, P., 1938.—“Sobre as lesões produzidas pela *Capillaria perforans* Kotlán e Orosz nas aves domesticas.” 9, 21-24. [English summary p. 22.]

(493a) Reis & Nobrega record heavy infestations of *Capillaria perforans* causing losses in guinea-fowls (*Numida meleagris*) and describe the extensive lesions produced in the crop and oesophagus of the host. The parasite is also recorded from the pheasant (*Phasianus colchicus torquatus*). D.O.M.

## 494—Arquivos do Instituto Penido Burnier.

- \*a. SOUZA QUEIRÓZ, L. DE, 1938.—“Um caso de cisticerco livre no vitreo.” 5, 103-104.

## 495—Azione Veterinaria.

- a. CARPANO, M., 1938.—“Strongilosi gastro-intestinale degli ovini e caprini in Albania.” 7 (5), 123-131.

(495a) Fluke was formerly considered a serious disease of sheep and goats in Albania, but Carpano claims that gastro-intestinal helminthiasis (due mainly to *Haemonchus contortus* and *Nematodirus filicollis*) is of far greater importance. This disease, which is manifested mainly from April to November after a wet winter and spring, is described in some detail. Veglia's CuSO<sub>4</sub> and sodium arsenate treatment is not only a good anthelmintic but also a roborant much needed in Albanian stock. B.G.P.

## 496—Bahia Medica.

- \*a. SILVEIRA, J., 1938.—“Tuberculose pulmonar ou esquistosomose do pulmão?” 9, 139-143.

## 497—Biologia Medica.

- \*a. PEREIRA, A. A., 1938.—“Observação de um caso de distomatose pulmonar humana (paragonimíase).” 12, 29-37.

## 498—Biological Bulletin.

- a. MARTIN, W. E., 1938.—“Studies on trematodes of Woods Hole: the life cycle of *Lepocreadium setiferoides* (Miller and Northup), Allocreadiidae, and the description of *Cercaria cumingiae* n. sp.” 75 (3), 463-474.

(498a) *Lepocreadium setiferoides* occurs in the flounder. It has been shown experimentally that its redia and cercaria develop in the snail, *Nassa obsoleta*. The cercaria encysts in annelids of the genus *Spio* and in turbellarian *Procerodes warreni*. *Cercaria cumingiae* n. sp. is described from *Cumingia*

\* Original not available for checking or abstracting.



*tellinoides*. The sporocysts and cercariae develop in the digestive gland and the cercariae encyst in the foot and various organs. The adult and its definitive host are unknown. It is believed that the adult belongs to the Allocreadiidae and probably occurs in some fish. R.T.L.

#### 499—Biologie Médicale.

- a. LAUNOY, L., 1938.—“Pouvoir helminthologique et constitution chimique.” 28 (7), 349-384.

(499a) Launoy describes the life-histories of some of the helminths which are parasitic in man, dealing especially with the methods of infection, the final positions of the parasites in the host, and the host-parasite relationships. The author then gives a critical review of the anthelmintics in use, relating the action of these to their structural formulae. R.H.H.

#### 500—Boletín Mensual de la Clinica de la Asociación de Damas de La Cavadonga.

- \*a. KOURI, P., 1938.—“Diagnostico, pronostico y tratamiento del parasitismo por *Taenia saginata*.” 5, 106-115.  
\*b. KOURI, P. & MACHO DOVAL, J., 1938.—“La raillietinosis humana en Cuba.” 5, 121-134.

#### 501—Boletín Sanitario del Departamento Nacional de Higiene. Buenos Aires.

- \*a. DIAZ, B., 1938.—“El indice anquilostomiasico en la ciudad de Resistencia (Chaco).” 2, 279-310.

#### 502—Boletines de la Sociedad de Cirugía de Rosario.

- \*a. BABBINI, R. J., PERALTA, L. & ROFFE, E., 1938.—“Quiste hidático de pulmón supurado ; operado en dos tiempos.” 5, 533-540.

#### 503—Boletines y Trabajos de la Sociedad de Cirugía de Buenos Aires.

- a. ARCE, J. & IVANISSEVICH, O., 1938.—Hidatidosis pulmonar múltiple. Lobectomía parcial. Curación.” 22 (8), 263-267.  
b. IVANISSEVICH, O., PIÑERO, T. A., RISOLÍA, A. A. & RIVAS, C. I., 1938.—“Secuelas cavitarias de los quistes hidatídicos del pulmón.” 22 (11), 391-396.  
c. DIEZ, J., 1938.—“Equinocosis de húmero. Resección e injerto. Curación.” 22 (18), 605-615.  
d. CALCAGNO, B. N., VIVOLI, D. R. & CORBELLA, E. G., 1938.—“Quistes hidatídicos caseosocalcificados.” 22 (27), 921-924.

#### 504—Bollettino delle Scienze Mediche. Bologna.

- \*a. GIORDANO, G. & BOCCIONI-GIORDANO, M., 1938.—“Echinococco a localizzazione epatica e splenica (contributo iconografico).” 110, 150-157.

\* Original not available for checking or abstracting.

505—*Bollettino di Zoologia*.

- a. SCIACCHITANO, I., 1938.—“Nuovo contributo alla conoscenza faunistica degli elminti cavernicoli d'Italia.” 9 (5/6), 199-205.
- b. SCIACCHITANO, I., 1938.—“Elminti del Bresciano.” 9 (5/6), 207-214.
- c. SCIACCHITANO, I., 1938.—“Su alcuni gordii del Museo di Verona.” 9 (5/6), 227-229.

(505a) Sciacchitano's list consists mainly of oligochaetes, but includes *Gordius villoti*. A.E.F.

(505b) Sciacchitano includes *Gordius villoti* in a list of worms which have been found in Italy. A.E.F.

506—*Botany and Zoology*.

- a. YAMASHITA, J., 1938.—“On *Breinlia dendrolagi* Solomon, 1933, a nematode parasite from the abdominal cavity of a kangaroo (*Macropus* sp.).” 6 (2), 388-390. [In Japanese.]
- b. YOSHIDA, S., 1938.—“Recent progress in parasitology. Supplement I.” 6 (2), 413-422. [In Japanese.]
- c. YOSHIDA, S., 1938.—“Recent progress in parasitology. Supplement II.” 6 (3), 571-578. [In Japanese.]
- d. YOSHIDA, S., 1938.—“Recent progress in parasitology. Supplement III.” 6 (4), 743-754. [In Japanese.]
- e. YAMASHITA, J., 1938.—“Studies on the family Echinostomatidae. Part I. Key to the sub-families and the genera of the family Echinostomatidae.” 6 (5), 873-886. [In Japanese.]
- f. YOSHIDA, S., 1938.—“Recent progress in parasitology. Supplement IV.” 6 (5), 909-918. [In Japanese.]
- g. KOIDZUMI, M., 1938.—“Introductory remarks on the investigation of acquired resistance for infection of intestinal nematodes.” 6 (6), 1075-1084. [In Japanese.]
- h. YAMASHITA, J., 1938.—“Studies on the Echinostomatidae. Part III. On *Paryphostomum radiatum* (Dujardin) Dietz, 1909 and *Petasiger exaeretis* Dietz, 1909, from the intestine of the Japanese cormorant, *Phalacrocorax carbo hanedae* Kuroda, in Japan.” 6 (6), 1085-1088. [In Japanese: English summary p. 1088.]
- i. MATUDA, S., 1938.—“Frequency and distribution of some helminthes from *Rana nigromaculata* Hallowell collected in the vicinity of Osaka.” 6 (8), 1377-1382. [In Japanese.]
- j. OGATA, T., 1938.—“A deformity of *Paracercorchis megacotyle* Fukui et Ogata.” 6 (9), 1561-1565. [In Japanese.]
- k. MIYATA, I., 1938.—“On the life-history of *Harmostomum horisawai* Ozaki, a trematode of the domestic fowl.” 6 (12), 2038-2048. [In Japanese.]

507—*Brasil-Medico*.

- a. ARAGÃO, R. M. DE, 1938.—“Incidencia verminotica na população de João Pessoa.” 52 (30), 679-680.

508—*British Journal of Surgery*.

- a. BOWESMAN, C., 1938.—“Intra-arterial glycerin treatment of elephantiasis.” 26 (101), 86-89.



**509—Bulletin de l'Académie de Médecine de Roumanie.**

- a. MOISESCO, T., PAIDIU, V. & DUMITRESCO, D., 1938.—“Contributions à l'étude clinique du kyste hydatique chez l'homme.” 6 (5), 671-682.

**510—Bulletin de l'Académie Royale de Médecine de Belgique.**

- a. RODHAIN, J., 1938.—“Contribution à l'étude des nodules filariens dus à l'*Onchocerca volvulus* Leuckart.” 6e Série, 3 (4), 163-179.

**511—Bulletin. Arkansas Agricultural Experiment Station.**

- a. SMITH, R. M. & BLEECKER, W. L., 1938.—“Poultry diseases.” No. 351 [49th Annual Report, 1936-1937], pp. 39-40.

(511a) Smith & Bleecker find that anthelmintic treatment had no consistent influence on the food required per dozen eggs laid, nor on the total food consumed, in poultry lightly infested with *Ascaridia lineata* and large tapeworms.

R.T.L.

**512—Bulletin de l'Institut Agronomique et des Stations de Recherches de Gembloux.**

- a. BRUEL, W. E. VAN DEN, 1938.—“Importance des foyers de *Heterodera marioni* Cornu en Belgique.” 7 (3), 262-267.

(512a) Bruel records several localized appearances of *Heterodera marioni* in Belgium. The parasite is recorded from black salsify, chicory, carrots and beet in the open, and from tomatoes and begonias grown in greenhouses. Various cryptogamia were observed in one of the affected areas and it is thought that a relationship may exist between these and the nematodes. Possible control measures are discussed.

A.E.F.

**513—Bulletin Médical. Paris.**

- a. JOYEUX, C., 1938.—“Quelques données nouvelles sur les helminthiases.” 52 (44), 796-798; (45), 803-805.

**514—Bulletins et Mémoires de la Société d'Électro-Radiologie Médicale de France.**

- \*a. NICOLAS, ZWIRN & PENEL, 1938.—“Un cas de kyste hydatique primitif du fémur.” 26, 350-353.

**515—Bulletin et Mémoires de la Société Médicale des Hôpitaux de Bucarest.**

- a. LITARCZEK, S. & CHISAR, 1938.—“Kyste hydatique primitif du poulmon à évolution latente (polymorphisme des manifestations cliniques à l'époque des complications).” 20 (8), 201-205.

\* Original not available for checking or abstracting.

## 516--Bulletin Mensuel. Société de Médecine Militaire Française.

- \*a. MUNARET, 1938.—“ Quelques localisations assez rares de kystes hydatiques.” 32, 123-126.
- \*b. MALARD, 1938.—“ La bilharziose vésicale et intestinale chez les tirailleurs sénégalais. Stérilisation rapide par l'anthiomaline.” 32, 368-374.

## 517--Bulletin du Musée Régional de Bessarabie.

- a. FLORESCU, B., 1938.—“ Révision de quelques espèces du genre *Centrorhynchus* (Lühe). (*Acanthocephala*). (*Centrorhynchus pinguis* Van Cleave 1918, parasite des *Pica p. pica* (L.) de Roumanie ; biologie, zoogéographie, synonymies).” Année 1937, No. 8, 79-94.

## 518--Bulletin du Musée Royal d'Histoire Naturelle de Belgique.

- a. ADAM, W., 1938.—“ Sur une larve de cestode de *Mesoplodon bidens* (Sowerby).” 14 (15), 1-17.
- b. ADAM, W., 1938.—“ Notes sur les céphalopodes. IX. Sur la présence d'une larve de cestode (*Tetrarhynchidae*) dans la cavité palléale d'un *Octopus* des Iles Andamans.” 14 (35), 1-4.
- c. MARKOWSKI, S., 1938.—“ Contribution à la connaissance des helminthes des poissons de la côte belge.” 14 (43), 1-10.

(518a) Adam discusses the various reports of cestode larvae from cetaceans, and finds there are two main types, possibly representing only two species. The present form is from the blubber of *Mesoplodon bidens*, one of the beaked whales. The invaginated scolex has 4 bothridia each with an accessory sucker, and is at the end of a long coiled filament, an involution of the exterior membrane whose cavity it completely fills. The larva is thus not a true cysticercus, and is referred to the Tetraphyllidea. E.M.S.

(518b) Adam has found a young tetrarhynchid, which he describes as *Nybelinia* sp., in the mantle cavity of a male octopus in the Andaman Islands. This is the first report of a tetrarhynchid from a cephalopod of the Indian Ocean. It is suggested that the normal situation of the parasite may be under the epidermis, from whence it may have been dislodged in the present case by fixation or handling. E.M.S.

(518c) Markowski has compiled notes on the distribution and frequency of the trematode, *Hemiurus ocreatus*, and of 8 species of cestodes from 20 species of fishes off the Belgian coast. The commonest cestode is *Bothriocephalus scorpii*. It is noted that this worm, so common in *Pleuronectes flesus* in the North Sea, is rare in this host in the Baltic Sea (Polish coast), whereas it is equally common in both localities from *Rhombus maximus*. A possible explanation of the finding of this species and *Abothrium gadi* in various species of *Raja* may be their ingestion with the teleost fishes upon which *Raja* feeds. The larval form, *Scolex pleuronectis*, has been found adhering to specimens of *Bothriocephalus scorpii* in such numbers as to give the strobila a spiny appearance. E.M.S.

\* Original not available for checking or abstracting.



## 519—Bulletin du Muséum d'Histoire Naturelle. Paris.

- a. NOUVEL, H. & NOUVEL, L., 1938.—“ Sur deux hôtes nouveaux de *Nectonema*.” Ser. 2, 10, 507-508.

(519a) *Spirontocaris polaris* and *Leander squilla* are given as new hosts for *Nectonema agile*, from material collected in Greenland by the “Pourquoi Pas.”

R.T.L.

## 520—Bulletins de la Société Turque de Médecine.

- \*a. BUMIN, H., 1938.—[Echinococcosis of breast.] 4, 262-264.  
\*b. TOPALOĞLU, A., 1938.—[Symptoms of perforation in case of nonperforated hydatid cyst of liver.] 4, 276-277.

## 521—Bulletin de la Société Zoologique de France.

- a. ROMAN, E., 1938.—“ Présence dans la région lyonnaise de *Leucochloridium macrostomum* (Trématodes Leucochloridiidae).” 63 (2), 145-152.  
b. GALLIEN, L., 1938.—“ Sur la spécificité parasitaire de *Polystomum integerrimum* Fröl.” 63 (4/5), 249-251.  
c. GALLIEN, L., 1938.—“ Sur un polystome parasite de *Hyla arborea* L. var *meridionalis* Boettger. (Note préliminaire).” 63 (4/5), 251-254.

## 522—Bulletin. Wisconsin Agricultural Experiment Station.

- a. ANON, 1938.—“ De-worming not beneficial to lightly infected pullets.” No. 440, pp. 10-11.

## 523—Cahiers de Médecine Vétérinaire.

- a. FAURE, L., 1938.—“ Nouveau traitement des plaies d'été (habronérose cutanée).” 8 (2), p. 35.  
b. JACQUET, J., 1938.—“ Immunité et spécificité dans les infestations intestinales par les nématodes.” 8 (3), 57-63.

(523a) Faure reports that the orthodox treatments of summer sores in horses are of little use. The habronemic lesions were found to occur during hot weather and persist in spite of treatment as long as the outside temperature remained high, later subsiding when the weather turned cooler. He shows, however, that “Kélène” sprayed on to the tumour after light scarification is very effective; about 2.5 c.c. four times a day is recommended. It is suggested that it is the cooling action that produces the curative effect, and that other cooling agents such as ice-packs and liquid carbon dioxide would be equally effective.

J.W.G.L.

(523b) Jacquet reviews the recent literature dealing with resistance to nematode worms and the related question of specificity.

P.A.C.

## 524—California and Western Medicine.

- a. McNAUGHT, J. B., 1938.—“ Trichinosis.” 48 (3), 166-173.

\* Original not available for checking or abstracting.

## 525—Canadian Entomologist.

- \*a. BAKER, A. D., 1938.—“Roundworm attacking pea moth.” 70 (6), p. 132.

## 526—Caribbean Medical Journal.

- \*a. SEHEULT, R., 1938.—“Historical review of ankylostomiasis in Trinidad.” Year 1938, pp. 46-54.

## 527—Časopis Lékařův Českých.

- a. SCHOVANEC, B., 1938.—“Echinokokkus jater s perforací do dutiny pleurální.” 77 (41), 1213-1216.

(527a) [Echinococcosis of the liver with perforation into the pleural cavity.]

## 528—Cellule.

- a. JEFFREY, E. C. & HAERTL, E. J., 1938.—“The nature of certain so-called sex chromosomes in *Ascaris*.” 47 (2), 237-244.

## 529—Ceylon Journal of Science. Section B. Zoology and Geology. (Spolia Zeylanica).

- a. BURT, D. R. R., 1938.—“New avian cestodes of the family Dilepididae from *Collocalia unicolor unicolor* (Jerd.), the Indian edible-nest swiftlet, with descriptions of *Pseudangularia thompsoni*, *P. triplacantha* gen. et spp. nov. and *Notopentorchis collocaliae* gen. et sp. nov.” 21 (1), 1-14.
- b. BURT, D. R. R., 1938.—“A new avian cestode, *Pseudochoanotaenia collocaliae* gen. et sp. nov. (Dipylidiinae), from *Collocalia unicolor unicolor*.” 21 (1), 15-20.
- c. BURT, D. R. R., 1938.—“New avian cestodes of the sub-family Dilepidinae from the eastern swallow (*Hirundo rustica gutturalis*), with descriptions of *Vitta magniuncinata* and *Vitta minutiuncinata* gen. et spp. nov.” 21 (1), 21-30.

(529a) Of 4 species of tapeworms found in *Collocalia unicolor unicolor* in Ceylon 3 are new, viz., *Pseudangularia thompsoni* n. g., n. sp. and *P. triplacantha* n. sp. belonging to the Dilepidinae, and *Notopentorchis collocaliae* n. g., n. sp. belonging to the Paruterinae. Hitherto no genus of the Dilepidinae had been described with 3 rows of rostellar hooks which are present in *Pseudangularia*. A table sets out the differences between *Notopentorchis* and the 5 known genera of Paruterinae possessing a double crown of hooks.

R.T.L.

(529b) *Pseudochoanotaenia collocaliae* n. g., n. sp. is described from the Indian edible-nest swiftlet in Ceylon. The presence of egg capsules and rostellum places it in the Dipylidiinae near *Choanotaenia* and *Eugonodaeum*, but the former has a sac-shaped uterus and in the latter the genital pores are unilateral.

R.T.L.

(529c) Three tapeworms of which 2 are new are recorded from *Hirundo rustica gutturalis* in Ceylon. The new species which belong to a new genus named *Vitta* in the subfamily Dilepidinae are named *Vitta magniuncinata*

\* Original not available for checking or abstracting.



gen. et sp. nov., t. sp. and *V. minutiuncinata* n. sp. *Vitta* resembles *Anomotaenia* in many respects but differs in the relation of the genital ducts to the longitudinal excretory vessels.

R.T.L.

### 530—China Journal.

- a. WU, K., 1938.—“Schistosomiasis in the Shanghai Hills region.” 28 (3), 133-139.

(530a) The Shanghai Hills, which lie about 20 miles southwest of the city, rise to about 400 feet from the surrounding plain. At the foot of the hills are several villages surrounded by rice fields separated by canals derived from the Grand Canal. In 1936 a number of Russian boy scouts camping there became infected with schistosomiasis after bathing in these canals. Wu has found *Oncomelania* snails among the vegetation in the main canal and in the ditches between the rice fields. Of 15,223 specimens collected less than 1% harboured schistosome cercariae. It was observed that cercarial infection of the snails was as heavy in the winter as in the summer months, but in winter the free cercariae are sluggish so that the probability of human infection is less, as a temperature of 15°C. to 20°C. is apparently needed for the penetration of mammalian skin.

R.T.L.

### 531—Chinese Medical Journal.

- a. FENG, L. C., HOEPPLI, R. & CHU, H. J., 1938.—“Studies on the sparganum of *Diphyllbothrium erinacei* in regard to immunity and regeneration.” 54 (6), 530-546.
- b. HSÜ, H. F., 1938.—“*Schistosoma turkestanicum* in North China.” 54 (6), 568-570.
- c. PEARSON, G. H. & YANG, C. T., 1938.—“Hookworm in Shaoyang, Hunan.” 54 (6), 574-578.

(531a) Emulsions of spargana fail to protect cats from infection with adult *Diphyllbothrium erinacei* when fed with spargana. Spargana from hedgehogs, when fed to monkeys, penetrate the subcutaneous tissues and remain spargana. Only the head regenerates a complete sparganum. Branching could not be produced by mechanical injury. Spargana could be kept for weeks in artificial media and later developed into adults in cats but did not grow in the medium.

R.T.L.

(531b) Although only a single male of *Schistosoma turkestanicum* is reported from a sheep near Peiping, Hsü is of opinion that it may prove to be an important parasite of domestic animals in North China.

R.T.L.

(531c) Hookworm due to *Ancylostoma duodenale* and *Necator americanus* is an important and widespread infection in Shaoyang, in Hunan. By direct smear diagnosis a 20% incidence was determined in 556 hospital patients. The disease affects almost entirely the male workers in and around the ricefields and causes semi-invalidism, debility and unfitness for work.

R.T.L.

### 532—Chirurg.

- a. TOOLE, H., 1938.—“Ergebnisse der chirurgischen Behandlung der Echinokokken (1930-1938).” 10 (21), 772-776.

## 533—Circular. Oregon Agricultural Experiment Station.

- \*a. MCKAY, M. B. & DYKSTRA, T. P., 1938.—“Potato diseases in Oregon and their control.” No. 127, 84 pp.

## 534—Circular. United States Department of Agriculture.

- a. SMITH, F. R., 1938.—“Muskrat investigations in Dorchester County, Md., 1930-34.” No. 474, 24 pp.

(534a) Smith's paper is concerned with the life-history, breeding and other habits of the muskrat of Maryland, *Ondatra zibethica macrodon*, and on pp. 20-21 he mentions helminths found during the 4-year investigation, viz., *Cysticercus fasciolaris*, *Dirofilaria* sp. (probably *D. immitis*), both identified by Shillinger, and *Parametorchis* sp. found in the liver of one animal. B.G.P.

## 535—Clujul Médical.

- \*a. DEGAN, E., OPREANU, I. & PENES, F., 1938.—[Hepatobronchial fistula in connection with case of suppurating hydatid cyst of liver perforated into bronchi.] 19, 489-498.

## 536—Comptes Rendus de l'Académie des Sciences de l'URSS.

- a. MARKOV, G., 1938.—“The survival of a broad tapeworm's plerocercoides (*Diphyllbothrium latum* L.) in artificial media.” 19 (6/7), 511-512.

(536a) Markov describes experiments carried out to determine the survival of *Diphyllbothrium latum* plerocercoids in 8 different artificial media. All media were prepared with Ringer-Locke saline solution. Plerocercoids survived longest in fish broth (63 days) and glucose+vitamins (56 days); the most unfavourable medium was glucose (survival of 30 days). The average length of life in the media was 46 days. A.E.F.

## 537—Comptes Rendus Mensuels des Séances de la Classe des Sciences Mathématiques et Naturelles. Académie Polonaise des Sciences et des Lettres.

- a. JANISZEWSKA, J., 1938.—“Recherches sur la vie et le développement des vers parasites internes du *Pleuronectes flesus* L.” Année 1938, No. 6/7, pp. 12-13.

(537a) An examination of 1,780 specimens of *Pleuronectes flesus* showed 77% to harbour helminths. Janiszewska records one trematode, 3 cestodes, 5 nematodes and 5 acanthocephalans. There are no new species. The pathological effects of some of the parasites are described. A.E.F.

## 538—Cornell Veterinarian.

- a. BOLEY, L. E., LEVINE, N. D. & KAMMLADE, W. G., 1938.—“A note on the effect of repeated treatment of sheep for *Haemonchus contortus*.” 28 (4), 296-298.

(538a) The repeated dosing of sheep for *Haemonchus contortus* apparently suppressed but did not completely expel all the *Haemonchus*

\* Original not available for checking or abstracting.

present. The treatments were : 4 treatments on 8 sheep with 4 oz. of a 1% copper sulphate at 2 day intervals, followed by 7 further treatments at weekly intervals ; 7 treatments of 5 c.c. tetrachlorethylene at weekly intervals on 2 sheep ; 7 weekly 0.5 dram doses of carbon disulphide in one sheep and 7 doses of 0.25 c.c. nicotine sulphate at weekly intervals in another sheep. A few *Haemonchus* were found at post-mortem in all the groups except in the sheep receiving tetrachlorethylene, and these were negative also to faecal examination after the second dosing.

J.W.G.L.

### 539—Delaware State Medical Journal.

- a. MILLER, E. R., 1938.—“Trichiniasis : a report of five cases.” **10** (11), 229-233.

### 540—Deutsche Medizinische Wochenschrift.

- a. MÜLLER, R. W., 1938.—“Zur Pathogenese der flüchtigen eosinophilen Lungeninfiltrate.” **64** (36), 1286-1287.

(540a) In Müller's opinion the disease described first by Löffler in 1931 as transient eosinophilic infiltration of the lung is mainly due to migrating *Ascaris* larvae. In 4 cases in which no larvae were found in the sputum and (later) no worms removed by an anthelmintic, infection was traced to a greenhouse where pig and horse dung were used.

B.G.P.

### 541—Deutsche Tierärztliche Wochenschrift.

- a. WAGNER, O., 1938.—“Grundsätzliches zur Entstehung und Bekämpfung der Palisadenwurmkrankheit der Pferde (Strongyliasis, Sclerostomiasis).” [Abstract of paper read to the Veterinärmedizinische Gesellschaft, Giessen.] **46** (21), 334-335.

### 542—Deutsche Zeitschrift für Nervenheilkunde.

- a. NAHMMACHER, H. S., 1938.—“Über Echinokokken des Gehirns.” **148** (1/2), 59-69.

### 543—Día Médico.

- \*a. IVANISSEVICH, O. & FERRARI, R. C., 1938.—“Equinococosis hidatídica.” **10**, 492-495.
- \*b. FERRARI, R. C., 1938.—“Equinococosis renal.” **10**, 511-513.
- \*c. IVANISSEVICH, O., 1938.—“Equinococosis hidatídica del pulmón.” **10**, 594-602.
- \*d. ARCE, J., 1938.—“Tratamiento del quiste hidático del pulmón.” **10**, 613-617.
- \*e. FERRARI, R. C., 1938.—“Hidatidosis del bazo.” **10**, 679-681.
- \*f. PRAT, D., 1938.—“Consideraciones clínicas y terapéuticas sobre los quistes hidáticos del pulmón.” **10**, 727-730.
- \*g. IVANISSEVICH, O., 1938.—“Tratamiento de los quistes hidatídicos del pulmón.” **10**, 1094-1097.
- \*h. GOYECHEA, J., HERNANDORENA, P. & LE CHIARE, F., 1938.—“Biliotórax.” **10**, 1174-1177.

\* Original not available for checking or abstracting.



## 544—Écho Médical du Nord.

- a. COUTELEN, F., BROGNART, M. & KNOLL, D., 1938.—“Recherches systématiques sur le parasitisme intestinal dans la région du nord. Premiers résultats chez des enfants de 2 à 6 ans.” 9 (15), 405-410.

## 545—Écho Vétérinaire.

- a. MOULAERT, 1938.—“De la fréquence de la laderie chez nos animaux de boucherie.” 67 (3), 66-70.

(545a) Moulaert considers that the frequency of taeniasis in man, in a given country, should be considered when regulations for meat inspection are drawn up. The Belgian regulations of 1937 have not been well received by the meat trade, and the author's experiences in Bruges during the Great War show that cysticerciasis in food animals was uncommon: only one infected pig and 154 cattle were detected in the 4 years 1915 to 1918, and of these only one ox was sufficiently infected to be condemned. B.G.P.

## 546—Ergebnisse der Hygiene, Bakteriologie, Immunitätsforschung und Experimentellen Therapie.

- a. HEINE, W., 1938.—“Epidemiologie und Bekämpfung der Ankylostomiasis in der Welt.” 21, 157-268.

(546a) Heine has reviewed the present position of hookworm disease from the aspects of epidemiology and control. After a general account of the disease and the parasites responsible, he discusses its distribution continent by continent. There are 20 pages of references and several maps. B.G.P.

## 547—Finska Läkarsällskapets Handlingar.

- a. TÖTTERMAN, G., 1938.—“Om maskanemins patogenes.” 81 (5), 456-476.

(547a) [This paper has been published in German with the title “Über die Pathogenese der Wurmanämie” in Acta Med. Scand., 1938, 96, 268-288. See Helm. Abs., Vol. VII, No. 159a.]

## 548—Folia Medica.

- \*a. CIMMINO, A., 1938.—“Endemia da *Anchilostoma duodenale* in una zona rurale del comune di Napoli.” 24, 352-380.

## 549—Frankfurter Zeitschrift für Pathologie.

- a. DIALER, L., 1938.—“Zur Histopathologie parasitärer Knochenkrankungen. (Alveolar-Echinococcus des Knochens und Troglotrema-Osteomyelitis).” 52 (4), 547-566.

## 550—Giornale di Medicina Militare.

- \*a. PLASTINA, M., 1938.—“Contributo alla terapia delle cisti da echinococco del polmone con la frenico-exeresi.” 86, 1306-1308.

\* Original not available for checking or abstracting.

## 551—Gyógyászat.

- \*a. FRIEDRICH, L., 1938.—[Tapeworm infestation, echinococcosis, trichinosis.] 78, 481-485.
- \*b. CSERMELY, H., 1938.—[Ileus caused by echinococcic cyst.] 78, 724-725.

## 552—Harefuah.

- a. YOUNOVITCH, R., 1938.—“Bilharziosis.” 15, 314-316. [In Hebrew : English summary, page x.]
- b. KARPLUS, 1938.—“The anatomical picture of bilharziosis of the human intestine. Macroscopical and microscopical demonstrations.” 15, p. 316. [In Hebrew : English summary, page xi.]

## 553—Helvetica Medica Acta.

- \*a. MÜLLER, A., 1938.—“Ueber Appendizitis durch Bilharzia.” 5, 901-903.

## 554—Hospital. Rio de Janeiro.

- a. RAMOS E SILVA, J., 1938.—“Sobre o tratamento da ‘larva migrans’.” 14 (3), 465-468.

(554a) Ramos e Silva briefly describes the various forms of creeping eruption, that in Brazil being apparently due to *Ancylostoma braziliense* larvae, and for treatment suggests the local application, as a compress, of oil of chenopodium and wintergreen. B.G.P.

## 555—Indian Journal of Pediatrics.

- a. CHAUDHURI, R. D. & CHATTERJI, R., 1938.—“Intestinal parasitism in children.” 5 (20), 211-218.

## 556—International Journal of Leprosy.

- a. KEIL, E., 1938.—“The effect of malaria on leprosy and filariasis.” 6 (2), 161-165.

## 557—Japanese Journal of Medical Sciences. V: Pathology.

- a. YOKOGAWA, S., 1938.—“Investigations on the mode of infection of *Wuchereria bancrofti*.” 3 (3), 167-181.

(557a) Although Formosa is warm throughout the year and *Culex fatigans* is found all over the island, the continual arrival of carriers of *Filaria bancrofti* from Amoy, Okinawa and Kyushu has not resulted in the establishment of the disease in the island. Yokogawa has therefore sought in the zooplankton, for a “waiting” host as an essential addition to the intermediate host in the life-cycle. He has also tried out the possibility of oral infection with mature larvae and of infection through the unbroken skin with negative results. The application of mature larvae in saline to the broken skin of mice, and the biting of mice by infected mosquitoes gave positive results, for the larvae were subsequently found in lymph spaces in the subcutaneous

\* Original not available for checking or abstracting.

tissues. He concluded that although filariasis is spread by mosquitoes the chances of its transmission are limited by a number of adverse factors, for not only must the larvae first be liberated from the mosquito but lymph must be exuded from the bite and the larvae must be sufficiently close to the lymph exudate to exhibit its powers of lymphotaxis in order to make its way successfully into the subcutaneous tissues.

R.T.L.

### 558—Journal of the Alabama Academy of Science.

- a. MUNDHENK, R. L., 1938.—“Preliminary observations on the morphology of *Microfilaria immitis*.” [Abstract of a paper presented at the 15th Annual Meeting of the Alabama Academy of Science.] 10 (2), p. 25.
- b. CHRISTENSON, R. O., 1938.—“Mortality studies on rats after lethal doses of *Trichinella spiralis*.” [Abstract of a paper presented at the 15th Annual Meeting of the Alabama Academy of Science.] 10 (2), p. 26.

(558a) Mundhenk has made the following observations on *Microfilaria immitis* which he says are either at variance with published facts or have not so far been recorded. (i) No periodicity of larvae in the blood stream was noticed. (ii) Fülleborn's measurements were checked and found to disagree with those given in the literature. (iii) Segmented appearance, absence of sheath, presence of mouth parts, and markings and a hook-like spine on the cephalic extremity were noted. (iv) Definite feeding activities were observed.

A.E.F.

### 559—Journal of the Ceylon Branch of the British Medical Association.

- a. FERNANDO, P. B., 1938.—“Anchylostomiasis in Ceylon.” 35 (5), 365-376.
- b. CHELLAPPAH, S. F., 1938.—“Public health aspects of ankylostomiasis.” 35 (6), 419-445.
- c. DASSANAYAKE, W. L. P., 1938.—“Early manifestations of filariasis.” 35 (6), 469-478.

(559b) In Ceylon periodic mass treatment is at present in vogue. By this means the intensity of hookworm infection has been reduced 50% at the end of a fortnight. The proper disposal of excreta is considered the one permanent measure in the control of the disease, but treatment is depended upon as a temporary control measure. While the protection of the feet by shoes or sandals is a good individual preventive it will not prove successful as a community measure. The changing of age-old customs takes time. Hospitals in Ceylon which formerly treated nothing but hookworm now have hardly any cases. The output of labour is now much greater and there is a decided improvement in the work and health of the labourers. Illnesses from other causes have been reduced since the introduction of hookworm treatment.

R.T.L.

(559c) From observations made during a survey in the North-Western Province in Ceylon, Dassanayake describes some of the early manifestations of filariasis in that country. The symptoms associated with localized manifestations of the disease, such as adenitis and lymphangitis, are indicated. Of the early general manifestations, skin changes are dealt with in particular. The presence of microfilariae in the blood in many of the children examined was usually associated with signs or symptoms of some kind.

J.J.C.B.



## 560—Journal of Comparative Pathology and Therapeutics.

- a. DUNGAL, N., GÍSLASON, G. & TAYLOR, E. L., 1938.—“Epizootic adenomatosis in the lungs of sheep—comparisons with Jaagisekte, verminous pneumonia and progressive pneumonia.” 51 (1), 46-48.

## 561—Journal of Economic Entomology.

- a. MILUM, V. G., 1938.—“A larval mermithid, *Mermis subnigrescens* Cobb, as a parasite of the honeybee.” 31 (3), p. 460.  
 b. HAYES, W. P. & DECOURSEY, J. D., 1938.—“Observations of grasshopper parasitism in 1937.” 31 (4), 519-522.

(561a) Milum records the occurrence of a larval *Mermis subnigrescens* in the abdomen of a honey bee, *Apis mellifera* L.; this is the first such observation in the U.S.A. The entire contents of the abdomen of the worker bee, which came from the apiary of the University of Illinois at Champaign, had apparently been consumed by the parasite. J.N.O.

(561b) Hayes & DeCoursey have studied the incidence of parasitism of nymphal and adult grasshoppers in Illinois and Indiana, U.S.A., during the summer of 1937. Besides a fungous disease, dipterous and external mite parasites they found, during August and September, that 13.9% of adults and 22.6% of nymphs were infested with mermithid larvae, probably those of *Mermis subnigrescens*. By about mid-October only 2% parasitism of adults was noted. J.N.O.

## 562—Journal of Heredity.

- a. ANON, 1938.—“Nematode resistance in poultry.” 29 (2), 53-54.

(562a) In this abstract from the Biennial Report of Kansas Experiment Station, 1937, reference is made to extensive experiments carried out to test the resistance of poultry to *Ascaridia lineata*. The heavier breeds such as Rhode Island Reds and the Plymouth Rocks were found to be less susceptible to the parasites than were the White Leghorns, Buff Orpingtons and White Minorcas. The experiments also showed that the offspring of a resistant strain of fowls harboured smaller and fewer worms than those of a non-resistant strain and a significant difference was obtained both for the F1 and F2 generations of chickens. D.O.M.

## 563—Journal of Immunology.

- a. CAMPBELL, D. H., 1938.—“Further studies on the ‘nonabsorbable’ protective property in serum from rats infected with *Cysticercus crassicolis*.” 35 (6), 465-476.

(563a) Campbell demonstrates further that the serum of rats infested with *T. crassicolis* contains two distinct antibodies, acting at two different times [see also Helm. Abs., Vol. VII, No. 347a & b]. The late immunity was not found in artificially immunized animals. P.A.C.

564—Journal of the Malaya Branch of the British Medical Association.

- a. ANDREWS, M. N. & SHRIMPTON, E. A. G., 1938.—“Intestinal parasites in women and children in Singapore.” 2 (3), 136-143.

565—Journal of the Marine Biological Association of the United Kingdom.

- a. BAYLIS, H. A., 1938.—“On two species of the trematode genus *Didymozoon* from the mackerel.” 22 (2), 485-492.

(565a) Without further knowledge of *Nematobothrium filarina* v. Ben., the question whether or no *Didymozoon* (sensu Odhner) and *Nematobothrium* are congeneric cannot be determined.  
R.T.L.

566—Journal de Médecine de Lyon.

- a. ROMAN, E., 1938.—“Sur le parasitisme intestinal des habitants de la région lyonnaise ; examens coprologiques des malades des hospices de 1932 à 1937.” 19 (450), 573-577.

567—Journal de Médecine de Paris.

- a. COFFIN, M., 1938.—“De l'abus des vermifuges.” 58 (22/23), 440-441.

568—Journal of the Missouri State Medical Association.

- \*a. KRUEGER, O., 1938.—“Rare case of typho-ascariasis.” 35, 351-352.

569—Journal of the Mount Sinai Hospital.

- a. BACIGALUPO, J., 1938.—“The life history of *Fasciola hepatica*.” 5 (2), 65-74.

(569a) Bacigalupo briefly recounts the life-history of *Fasciola hepatica* which, in the Argentine, uses *Limnaea viatrix* as intermediary. Daughter rediae were seldom found, and never in summer. The intramolluscan phase occupies 57 to 60 days ; the cercaria is free-swimming for 12 to 30 minutes ; experimental definitive hosts pass eggs in 54 to 90 days. Not only liver, but also bile (given therapeutically) may contain fluke eggs and so lead to a wrong diagnosis since these eggs pass through man's alimentary system unchanged.  
B.G.P.

570—Journal of Oriental Medicine.

- a. YAMANE, Y., 1938.—“Studies on the natural infections with *Trichinella spiralis*, *Entamoeba histolytica*, *Clonorchis sinensis* and *Dirofilaria immitis* on the street dogs in Mukden.” 29 (1), 111-115. [In Japanese : English summary p. 31.]  
b. LEO, T. L., 1938.—“Cases of distoma pulmonare seen in Mukden.” 29 (5), 1469-1476. [Also in Japanese pp. 1465-1469.]

\* Original not available for checking or abstracting.

(570a) Autopsies on 60 street dogs in Mukden, Manchukuo, showed natural infections with *Trichinella* in one case, *Clonorchis* in 5 cases and *Dirofilaria immitis* in 11 cases. R.T.L.

#### 571—Journal of the Public Health Association of Japan.

- a. MIYAJIMA, M., 1938.—“On the prevention of schistosomiasis in Japan.” 14 (11), 1-6.

(571a) In Japan the distribution of *Schistosoma japonicum* is remarkably localized but its effect is very heavy. From 1868 to 1925 the deaths from schistosomiasis were about 100 annually, but in 1930 to 1934 they were a little less than 70. Preventive measures now in force are (i) disposal of eggs; (ii) prevention of skin infection; (iii) restriction of the use of cows for farm work; (iv) treatment of patients; (v) prevention of breeding of snails; and (vi) education. Breeding of snails is controlled by regulation of ditches in the paddy fields, the conservancy of rivers and streams, the sprinkling of quick lime and the pouring of hot water on the ditches. R.T.L.

#### 572—Journal de Radiologie et d'Électrologie.

- a. BRUN, JAUBERT DE BEAUJEU & BÈGE, 1938.—“Évolution rapide d'un kyste pulmonaire avec formation d'images de décollement.” 22 (10), 495-500.

#### 573—Journal of the Tennessee Academy of Science.

- a. BYRD, E. E., 1938.—“Studies on blood flukes of the family Spirorchidae. I. Preliminary report.” 13, 133-136.

(573a) Byrd has re-studied the blood flukes of turtles. The present preliminary communication gives a list of hosts, the incidence of parasitism and the approximate host distribution of the parasite species met with in Reelfoot Lake. Of species of turtle examined only one was negative, in two there was 100% infection; 85% of all the turtles were infected. Sixteen species of blood flukes were collected apart from 2 new forms yet to be described. R.T.L.

#### 574—Journal of Wildlife Management.

- \*a. GOWER, W. C., 1938.—“Seasonal abundance of some parasites of wild ducks.” 2 (4), 223-232.

#### 575—Južgoslovenski Veterinarski Glasnik.

- a. WERTHEIM, P., 1938.—“Istraživanje metiljavosti. *Galba truncatula* u okolici gračaca, mogućnost njezina suzbijanja i njezino značenje za metiljavost.” 18 (3), 95-105.
- b. MARTINČIĆ, M., 1938.—“Neobični tok i neobični patološko anatomske nalaz metiljavosti godine 1936 i 1937.” 18 (4), 149-153.
- c. MIRKOVIĆ, M. & BUTOZAN, V., 1938.—“Metiljavost ovaca 1937 god. u Podraškom Polju sreza MrkonjićGrada Vrbaske banovine.” 18 (5), 186-191.
- d. WERTHEIM, P. & RUKAVINA, J., 1938.—“Istraživanje metiljavosti VII. Nalazišta životni uslovi metiljskog puža i metiljavost u srezu Gospić.” 18 (9), 355-373.

\* Original not available for checking or abstracting.



(575a) Wertheim describes the swamps and other habitats of *Limnaea truncatula* around Gracac; many of the snails were infected with liver-fluke. From the fact that breeding is maximal in the spring, he concludes that control measures should be applied in early summer. He states that the snails do not live longer than 4 years. B.G.P.

(575b) [Unusual course and unusual findings of liver-fluke in 1936 and 1937.]

(575c) [Liver-fluke disease in sheep in 1937 in the Valley of Podraska, Mrkonjic-Grad District, Vrbas Province.]

(575d) Wertheim & Rukavina find that *Limnaea truncatula* occurs in western Yugoslavia along the northern coast of Gospic, where it favours streams rather than swamps. The authors consider that close application of the shell-mouth to the surface of a stone protects the snail from desiccation. B.G.P.

#### 576—Keijo Journal of Medicine.

- a. PARK, J. T., 1938.—“A rat trematode, *Echinostoma hortense* Asada, from Korea.” 9 (4), 283-286.
- b. PARK, J. T., 1938.—“An amphibian trematode, *Polystoma integerrimum* (Frolich, 1791), from Uchikongo, Korea.” 9 (4), 287-289.
- c. PARK, J. T., 1938.—“A new fish trematode with single testis from Korea.” 9 (4), 290-298.

(576a) Asada's description of *Echinostoma hortense* from rats in Japan is supplemented by a text figure and further details based on Korean material.

R.T.L.

(576c) From the Korean fresh-water fish *Carassius auratus*, a new Alloeocreadiidae named *Carassotrema koreanum* n.g., n.sp. is described. The genus *Bivesicula* Yamaguti, 1934 is removed from the Monorchidae. Megasoleninae Manter, 1935 is removed to the Alloeocreadiidae. R.T.L.

#### 577—Klinicheskaya Meditsina.

- \*a. POTAPOV, V. G., 1938.—[Intradermal test with diluted antigen in echinococcosis.] 16, 564-565.
- \*b. PEVZNER, M. B., 1938.—[Case of strongyloidosis.] 16, 568-569.

#### 578—Lyon Médical.

- a. SÉDALLIAN & COUDERT, J., 1938.—“Association de cirrhose et de kyste hydatique avec réaction de Casoni négative.” 162 (39), 325-328.
- b. DESJACQUES & MARTINON, 1938.—“Kyste hydatique du cou.” 162 (41), 372-375.

#### 579—Maandschrift voor Kindergeneeskunde.

- a. WIJCKERHELD BİSDOM, C. J., 1938.—“Meningeale verschijneselen bij ascariden.” 7, 490-498.

\* Original not available for checking or abstracting.

## 580—Maanedsskrift for Dyrlaeger.

- a. CHRISTIANSEN, M., 1938.—“Baendelorme (Cestoder) hos Pattedyrvildt, deres Betydning og Bekaempelse.” 50 (11), 282-291.

(580a) [For abstract of this paper see below No. 726a.]

## 581—Marseille Médical.

- a. VIGNE, P. & BONNET, J., 1938.—“Varices lymphatiques consécutives à un adéno lymphocèle d'origine filarienne probable.” 75me Année, 2, 413-414.

## 582—Medical Annals of the District of Columbia.

- a. BOZICEVICH, J. & BRADY, F. J., 1938.—“Studies on oxyuriasis. XV. A study of five hundred and four boys in a boy's camp.” 7 (6), 187-190.  
 b. SANDLER, I. L., 1938.—“Creeping eruption. Report of two cases and brief review of the literature.” 7 (8), 245-247.

(582a) Bozicevich & Brady report the occurrence of pinworms (*Enterobius vermicularis*) in 57.3% of 504 white boys between the ages of 6 and 16 years at the Washington Metropolitan Police Boys' Camp. Four swabbings were used, 68% of the cases being revealed by the first, and the remaining 32% by subsequent examinations. It was found that swabs not taken on consecutive days will diagnose more cases than the same number of swabs taken consecutively. Analysis of the incidence according to age did not show a definite correlation, except a decline in incidence after 14 years; and a study of the family size indicated that large families appear to be a factor predisposing to a high incidence. M.R.Y.

## 583—Medical Bulletin of the Veterans' Administration.

- a. COHN, F., 1938.—“*Taenia solium* cysticercosis.” 15 (2), 184-188.

## 584—Medical Parasitology and Parasitic Diseases.

- a. VASILKOVA, Z. G., 1938.—“Déshelminthisation des ordures pendant leur transformation en composts.” 7 (6), 898-906. [In Russian: French summary p. 906.]  
 b. DINNIK, N. N., 1938.—“Indépendance des espèces *Trichocephalus trichiurus* (L., 1771) et *Trichocephalus suis* (Schränk, 1788).” 7 (6), 907-918. [In Russian: French summary p. 918.]

(584a) Vasilkova finds that the transformation of dung and offal into compost at temperatures above 40°C. is one of the safest methods of dealing with helminth eggs. In summer, horse manure, sweepings and turf are added to the composting mixture. *Ascaris* eggs are destroyed in 6 weeks to 4 months. During the winter months similar effects are produced if horse manure and sewer sump residues are added to the composting mixture. R.T.L.

(584b) From a comparative study of *Trichuris trichiura* from man and *Trichuris suis* from pigs, Dinnik reaches the conclusion that these 2 forms are not identical. They differ in the size of the eggs and of the

larvae at the infective stage, and in the time taken by the eggs to develop. The spicules and the sperm ducts are different in length. The diploid number of chromosomes is 4 in *T. trichiura* and 6 in *T. suis*. R.T.L.

#### 585—Medical Press and Circular.

- a. ANOUS, M. A., 1938.—“The diagnosis and treatment of bilharziasis.” 196 (23), 502-510.

#### 586—Medical Record.

- a. LIGHTSTONE, A., 1938.—“Echinococcus cysts of the liver and kidney.” 148 (6), 205-209.

#### 587—Medicina. México.

- \*a. MAZZOTTI, L., ELIAS, F. C. & REBOLLEDO, S., 1938.—“Un caso humano de distomatosis hepática.” 18, 561-564.

#### 588—Medicina de Hoy.

- a. BEYRA ALEMAÑY, M., 1938.—“Sobre parasitismo intestinal en el niño de Camaguey.” 3 (12), 722-728.

#### 589—Mémoires de l'Académie de Chirurgie.

- a. TISSERAND, G. & BAUFLE, P., 1938.—“À propos de deux nouveaux cas franc-comtois d'échinococcose alvéolaire.” 64 (23), 1018-1023.

#### 590—Memoirs. Michigan State College Agricultural Experiment Station.

- a. GOWER, W. C., 1938.—“Studies on the trematode parasites of ducks in Michigan with special reference to the mallard.” No. 3, 94 pp.

(590a) Gower has studied 15 species of parasitic trematodes from 11 species of ducks in Michigan, including *Amphimerus elongatus* n. sp., *Maritrema nettae*, n. sp. and *Leucochloridiomorpha macrocotyle* n. g., n. sp. Part I deals with hosts, life-histories and economic importance of these 15 species. Part II contains a key to all the genera and a check list of the species reported from ducks, arranged phylogenetically with brief descriptions, and a final list according to hosts. The bibliography contains 189 references.

E.M.S.

#### 591—Memorias do Instituto Oswaldo Cruz.

- a. TRAVASSOS, L., 1938.—“Informações sobre a fauna helminthologica de Matto Grosso. Trematoda II.” 33 (4), 461-467.

(591a) Travassos has illustrated and described in more detail 5 species of Echinostomidae concerning which he published a preliminary note in 1922, viz., *Nephrostomum limai*, *Stephanoprora anomala*, *Episthmium proximum*, *E. oscari* and *Chaunocephalus panduriformis*. He also illustrates and comments briefly on *Distomum suspensum* Braun, 1901 from *Corvus* sp. in Brazil. R.T.L.

\* Original not available for checking or abstracting.



## 592—Mikrokosmos.

- a. AUER, A., 1938.—“Entwicklung der männlichen Geschlechtszellen von *Ascaris megalocephala*.” 32 (3), 45-50.

## 593—Monde Médical.

- \*a. LOEPER, M. & BIOY, E., 1938.—“Le syndrome pyloro-duodénal du ténia.” 48, 921-926.

## 594—Nachrichtenblatt für den Deutschen Pflanzenschutzdienst.

- a. VOELKEL, H. & KLEMM, M., 1938.—“Die wichtigsten Krankheiten und Schädigungen an Kulturpflanzen im Jahre 1938. (Beobachtungs- und Meldedienst der Biologischen Reichsanstalt.)” 19 (2), Beilage, 31 pp.

(594a) On page 18 of this review of the most important diseases and injuries to cultivated plants in Germany during 1938, Voelkel & Klemm mention isolated attacks of *Anguillulina dipsaci* on rye and severe attacks of *Heterodera schachtii* on oats, both occurring in various districts of Westphalia.

T.G.

## 595—New Zealand Journal of Agriculture.

- a. MORRISON, A. E., 1938.—“Prevention of hydatids. Act operates on 1st January.” 57 (6), p. 499.

(595a) The Dogs Registration Amendment Act 1937 (New Zealand) contains legislative provision to effect a reduction in the prevalence of hydatid. By the act which came into force on 1st January 1939, local authorities are requested to supply dog-owners with the prescribed quantity of the approved remedy for treating dogs. By the Dogs Registration (Prevention of Hydatid Disease) Regulations 1938, which came into force on the same date, arecoline hydrobromide is the approved remedy. Instructions as to its use are set out in the Regulations and a printed copy of the instructions must be given to each person registering a dog. A fee of one shilling per dog is payable by the dog-owners in respect of the supply of the approved remedy. Copies of the Regulations are obtainable from the Government Printer, Wellington, N.Z., price 2d., plus postage 1d., with order.

R.T.L.

## 596—Nova Acta Leopoldina.

- a. VOIGT, E., 1938.—“Ein fossiler Saitenwurm (*Gordius tenuifibrosus* n. sp.) aus der eozänen Braunkohle des Geiseltales.” 5 (31), 351-360.

## 597—Novitates Zoologicae.

- a. ROTHSCILD, M., 1938.—“Notes on the classification of cercariae of the superfamily Notocotyloidea (Trematoda), with special reference to the excretory system.” 41 (2), 75-83.  
 b. ROTHSCILD, M., 1938.—“Further observations on the effect of trematode parasites on *Perringia ulvae* (Pennant) 1777.” 41 (2), 84-102.

\* Original not available for checking or abstracting.

- c. ROTHSCCHILD, M., 1938.—“The excretory system of *Cercaria coronanda* n. sp. together with notes on its life-history and the classification of cercariae of the superfamily Opisthorchioidea Vogel 1934 (Trematoda).” 41 (2), 148-163.
- d. ROTHSCCHILD, M., 1938.—“A note on the fin-folds of cercariae of the superfamily Opisthorchioidea Vogel 1934 (Trematoda).” 41 (2), 170-173.

(597a) The cercariae of the Notocotyloidea are divided into 2 sections, viz., Notocotylidae: cercaria without aural lappets or collar, and Pronocephalidae: cercaria with aural lappets or collar. The former group can be divided again into 3 according to the structure of the anterior transverse portion of the excretory vesicle. R.T.L.

(597b) In the mollusc *Peringia ulvae* size of shell is no criterion of its age. Variation in growth, shell texture, shape, colour and in the consistency of the soft parts are probably linked with environmental factors. Pelseneer's rule that males are more frequently infected with trematodes than females applies in this species. The penis is abnormal and reduced in infected males. Some species of cercariae disturb the metabolism of the snail to a greater extent than others. R.T.L.

(597c) *Cercaria coronanda* n. sp. which parasitizes *Peringia ulvae* encysts in *Gobius ruthensparri*. The metacercaria pertains to the Neochasminae. The characters of the PLEUROLOPHOCERCA and PARAPLEUROLOPHOCERCA groups of cercaria are discussed. R.T.L.

(597d) So far only 2 types of cercariae have been proved to belong to the Opisthorchioidea and the only important difference between them is the position of the tail fin-folds. This is either a median dorso-ventral or a continuous lateral fin-fold. In some early descriptions, e.g., that of the cercaria of *Clonorchis sinensis* by Vogel, a dorso-ventral fin-fold has been erroneously described as a lateral fin-membrane. It would appear more correct to say that within the Opisthorchioidea there occur differences in the structure of the caudal fins of the cercariae rather than 2 distinct larval types. R.T.L.

#### 598—Novy Khirurgicheskiy Arkhiv.

- \*a. REVYAKIN, S. A., 1938.—[Extraperitoneal approach to liver in surgical therapy of echinococcosis.] 42, 71-72.

#### 599—Nuova Veterinaria.

- a. COPPINI, R., 1938.—“L'acuariosi (o disfaragosi) dei polli in Umbria.” 16 (11), 312-316.

(599a) Coppini describes the lesions associated with *Acuaria hamulosa* in chickens. Nodular formation in the gizzard was apparent. The centre of the nodule was occupied by the parasite. It was surrounded by an inflammatory zone in which eosinophiles and leucocytes were prominent. Some of the nodules, probably those of longer standing, showed necrosis in varying degrees. There was a great deal of catarrh in the gizzard. P.A.C.

\* Original not available for checking or abstracting.

## 600—Nuovo Ercolani.

- a. ROETTI, C., 1938.—“*Spiroptera sanguinolenta* nel cane.” 43 (1), 30-33.
- b. ROETTI, C., 1938.—“Lo sclerostoma armato nelle arterie mesenteriche degli equini.” 43 (3), 99-103.

## 601—Onderstepoort Journal of Veterinary Science and Animal Industry.

- a. ORTLEPP R. J., 1938.—“South African helminths. Part II. Some taenias from large wild carnivores.” 10 (2), 253-274.
- b. ORTLEPP, R. J., 1938.—“South African helminths. Part III. Some mammalian and avian cestodes.” 11 (1), 23-50.
- c. ORTLEPP, R. J., 1938.—“South African helminths. Part IV. Cestodes from Columbiformes.” 11 (1), 51-61.
- d. ORTLEPP, R. J., 1938.—“South African helminths. Part V. Some avian and mammalian helminths.” 11 (1), 63-104.

(601a) *Taenia multiceps* and *T. serialis* are recorded from jackals, *T. pisiformis* from a wild dog, and 7 new *Taenias* are described and figured from large wild carnivores in South Africa, viz., *T. bubesei* n. sp. and *T. gonyamai* n. sp. from *Leo leo krugeri*, *T. ingwei* n. sp. from *Panthera pardus*, *T. hlosei* n. sp. and *T. acinomyxi* n. sp. from *Acinomyx jubatus jubatus*, and *T. jakhalsi* n. sp. and *T. pungutchui* n. sp. from *Thos mesomelas mesomelas*. The 41 species of the genus *Taenia* now known are tabulated with details of hooks, number of testes, number of main uterine branches, the sizes of the eggs, and the hosts.

R.T.L.

(601b) Eight new cestodes from South African mammals and birds are recorded by Ortlepp, viz., *Raillietina (Skrjabinia) deweti* n. sp. from *Numida* sp.; *Schistometra korhaani* n. sp. from *Afrotis afroides afroides* and *Eupodotis barrowi*; *Inermicapsifer leporis* n. sp. from *Lepus capensis vernayi*; *Catenotaenia geosciuri* n. sp. from *Geosciuris capensis capensis*; *Onderstepoortia taeniaeformis* n. g., n. sp. from *Burhinops capensis capensis*; *Hymenolepis suricattae* n. sp. from *Suricata suricatta suricatta*; *Cladotaenia freani* n. sp. from a Black Eagle Hawk (? *Pteroaetus verreauxi*); and *C. vulturi* n. sp. from “a vulture”.

R.T.L.

(601c) Ortlepp records 7 cestode species from 4 species of South African pigeons, viz., *Raillietina (Fuhrmanetta) crassula*, *R. (R.) columbiella* n. sp., *R. (R.) vinagoi* n. sp., *R. (R.) delalandei* n. sp., *R. (R.) vogeli* and *Hymenolepis oenai* n. sp.: the species identified by Johri (1934) as *R. (R.) polychalix* Kotlan, 1920 is considered to be a new species and is named *R. (R.) johri*.

R.T.L.

(601d) Twenty species of helminths are described by Ortlepp from South African birds and mammals. Of these 14 are new, viz., *Hymenolepis cormoranti* n. sp. and *Contracaecum carlislei* n. sp. from reed cormorants; *Idiogenes kori* n. sp., *I. kolbei* n. sp., *Subulura otidis* n. sp., *Acuaria semei* n. sp. and *Histiocephalus chorioidis* n. sp. from a giant bustard; *Habronema numidae* n. sp. from a guinea fowl; *H. fischeuri* var. *elanii* n. var. from a black-shouldered kite; *Porrocaecum spathulispiculum* n. sp. from *Afrochicla cabanisi*; *Raillietina (s.l.) thryonomysi* n. sp. and *Trichuris vondweii* n. sp. from cane rats; *Cooperiodes hepaticae* n. sp. from an impala, and *Trichonema (Cylicocyclus) gyallocephaloides* n. sp. from a zebra.

R.T.L.



## 602—Orvosi Hetilap.

- a. VÁMOS, L., 1938.—“Antianyagok állati parazitákkal szemben.” 82 (43), 1043-1045.
- b. FÜSTHY, O., 1938.—“*Enterobius (Oxyuris) vermicularis* előfordulása féregnyulványokban.” 82 (45), 1085-1089.

(602a) [Antibodies against animal parasites.]

(602b) [*Enterobius vermicularis* infestation of the appendix.]

## 603—Oto-Rhino-Laryngologia.

- a. IDA, T. & SHŌJI, N., 1938.—“Der Heilungsverlauf nach Mastoidoperation bei Askaris- (sowie Anchylostoma-) trägern.” 11 (11), p. 993.

## 604—Parasitology.

- a. REYNOLDS, B. D., 1938.—“Developmental stages of *Panopistus pricei* Sinitin in *Agriolimax agrestis*.” 30 (3), 320-323.
- b. DAVIES, T. I. & EVANS, R., 1938.—“Report on helminths collected from an Indian chukar, with descriptions of two new species of *Raillietina* Fuhrmann, 1920.” 30 (4), 419-426.
- c. STEWART, M. A. & DOUGLAS, J. R., 1938.—“Studies on the bionomics of *Trichostrongylus axei* (Cobbold) and its seasonal incidence on irrigated pastures.” 30 (4), 477-490.
- d. STUNKARD, H. W., 1938.—“The development of *Moniezia expansa* in the intermediate host.” 30 (4), 491-501.

(604a) Reynolds shows that *Agriolimax agrestis* may act as a first and second intermediate host of *Panopistus pricei* and describes the excretory system of the developing metacercariae. R.T.L.

(604b) From *Alectoris graeca chukar*, Davies & Evans have recovered *Heterakis gallinae* and *Subulura brumpti* from the caeca, and from the intestine one immature *Taenia* sp. and two new species of *Raillietina*. *Raillietina* (R.) *graeca* n. sp. is distinguished mainly by the following features. The testes extend to the lateral fields outside the excretory canals; the ovary is small, only occupying one sixth of the median field and each uterine capsule contains 9 to 12 onchospheres. *Raillietina* (*Skrjabinia*) *indica* n. sp. can be recognized by the presence of a larger number (52 to 60) of testes than the species nearest to it morphologically, by the large size of its cirrus sac, and by the size of the rostellar hooks which measure 13 $\mu$  long. P.A.C.

(604c) Investigating the bionomics of *Trichostrongylus axei* eggs and larvae, Stewart & Douglas found that eggs would hatch in an atmosphere of only 29% Relative Humidity, but the hatching larvae failed to survive. Eggs were killed at -7°C., but survived immersion in water. Infective larvae survived more than 104 days at 29% R. H., 20 days at -7°C., and 230 days submerged under 5 mm. of water; they appeared to be negatively geotropic, but neutral to light. As judged by egg-counts, the incidence of the parasite in sheep was seasonal with a very low minimum from June to August. The use of a mixture of nicotine and copper sulphates led to 96% decrease [in intensity?] as compared with a 24% decrease in untreated controls. Some deaths occurred but spontaneous recovery was commonly found.

B.G.P.

(604d) Stunkard presents a further account of his experiments incriminating mites as intermediaries of *Moniezia expansa* and *Cittotaenia variabilis* [see Helm. Abs., Vol. VI, No. 229b], the first anoplocephaline cestodes whose life-histories have been determined. Onchospheres of both species were found in the body cavity of tyroglyphid mites previously fed with eggs, but these onchospheres failed to develop. Feeding eggs to oribatid mites of the genus *Galumna* (sens. lat.) led to the discovery of all stages from onchosphere to cysticeroid (mainly *M. expansa*), and these are here described and illustrated by microphotographs. The cysticeroid is fully formed in about 16 weeks. Stunkard confirms Hall's observation that eggs tend to be ejected some distance from the drying segment. This observation led Hall to assume that "a coprophagous insect is not an intermediate host," and in fact these mites are not coprophagous but live around the roots of grasses.

B.G.P.

#### 605—Paris Médical.

- a. YOVANOVITCH, B. Y., 1938.—"Opportunité de la kystectomie dans le traitement des kystes hydatiques du foie." 28 (31), 92-96.

#### 606—Peking Natural History Bulletin.

- a. WU, K., 1938.—"On the occurrence of *Isoparorchis* among fishes in China (Trematoda: Isoparorchidae)." 12 (4), 273-277.
- b. HU, S. M. K., 1938.—"Studies on the susceptibility of Shanghai mosquitoes to experimental infection with *Wuchereria bancrofti* Cobbold. V. *Culex fuscus* Wiedemann." 13 (1), 39-52.
- c. HU, S. M. K., 1938.—"Studies on the susceptibility of Shanghai mosquitoes to experimental infection with *Wuchereria bancrofti* Cobbold. VI. *Culex vagans* Wiedemann." 13 (2), 113-116.
- d. KU, C. T., 1938.—"New trematodes from Chinese birds." 13 (2), 129-136.

(606a) Wu agrees with Ejsmont (1932) that *Isoparorchis hypselobagri* is the only species of this genus in Asia. It occurs in China in the swim-bladder of the food fishes, *Parasilurus asotus*, *Pelteobagrus fulvidraco* and *Odontobutis obscura*. It is doubtful if these flukes can establish themselves in the human intestine, although they are probably eaten frequently in improperly cooked fish.

R.T.L.

(606b) Of 75 *Culex fuscus* experimentally fed on a *F. bancrofti* case in Shanghai, 69 were found to have infective larvae on dissection. In most of the infected mosquitoes filariae at various stages had undergone chitinization. In only 7 of the infected mosquitoes were none of the infective larvae chitinized. This high incidence of chitinization is thought by Hu to reduce the potential rôle of this mosquito as a carrier.

R.T.L.

(606c) After feeding *Culex vagans* on a heavily infected case of *Filaria bancrofti*, 91.7% were found later to have infective filarial larvae. In those showing a positive infection the average number of larvae per mosquito was 10.2. The infectivity was compared with that of *Culex pipiens* var. *pallens* and was found to be similar in percentage and in intensity.

R.T.L.

(606d) Three new species are described from Chinese birds near Soochow: *Oswaldoia turdia* n. sp. from *Turdus merula mandarinus*, *Paramonostomum macrostomum* n. sp. from *Fulica atra atra*, and *Petasiger longicirratu* n. sp. from *Cassarca ferruginea*. Keys are given to the species of the genera *Paramonostomum* and *Petasiger*.  
R.T.L.

#### 607—Philippine Journal of Animal Industry.

- a. REFUERZO, P. G. & GARCIA, E. Y., 1938.—“The crustacean intermediate hosts of *Gnathostoma spinigerum* in the Philippines and its pre- and intracrustacean development.” 5 (4), 351-362.
- b. JESUS, Z. DE, 1938.—“The destruction of *Lymnaea philippinensis* for the control and eradication of fascioliasis in ruminants.” 5 (6), 581-595.

(607a) Refuerzo & Garcia state that *Gnathostoma spinigerum* eggs in faeces are found at all stages from the single-celled to the multicellular stage. At about 30°C. they embryonate in 2 days and hatch from the 4th. Development was observed in copepods (probably *Encyclops serrulatus* and *Microcyclops bicolor*) but not in cladocerans (probably *Moina macrocopa*), and measurements of intracrustacean stages are given.  
B.G.P.

(607b) In the Philippines, *Fasciola hepatica* and *F. gigantica* are prevalent in oxen, carabaos, sheep and goats, and are both carried by *Limnaea philippinensis*. De Jesus finds that neither the snail nor its eggs can resist drying, and the snail is readily eaten by domestic ducks. Air-slaked lime at the rate of 100 g. per square metre was ineffective, but good results were obtained with copper sulphate either as a solution (1 p.p. million), or as a dust (1.5 g. per square metre). The latter method was found not to affect fish.  
B.G.P.

#### 608—Philippine Journal of Science.

- a. TUBANGUI, M. A. & AFRICA, C. M., 1938.—“The systematic position of some trematodes reported from the Philippines.” 67 (2), 117-125.

(608a) *Heterophyes brevicaeca* Africa & Garcia, 1935 is placed in the genus *Spelotrema* in the Microphallidae, the absence of a receptaculum seminis excluding it from the Heterophyidae. *Heterophyes expectans* Africa & Garcia, 1935 is made type of *Heterophyopsis* n. g.: the relative position of the testes, location of vitellaria and acetabulum, and number of hooks on the gonotyl differentiate it from *Heterophyes*. *Haplorchis anguillarum* Tubangui, 1933 is transferred to the genus *Galactosomum*.  
R.T.L.

#### 609—Phytopathology.

- a. KING, C. J., 1938.—“Comparative injury of root-knot nematodes to different varieties and species of cotton in control experiments under irrigation.” [Abstract of a paper presented at the 1938 Annual Meeting of the Southern Division of the American Phytopathological Society.] 28 (9), p. 664.

(609a) Little injury due to root-knot nematodes is shown by upland varieties of cotton growing in soils with a moisture equivalent of over 18, but at 16 or below disease is apparent. The more susceptible varieties are



Egyptian, American Egyptian, Peruvian and Sea Island, while the F hybrids of upland and American Egyptian are intermediate in this respect. The ratio of yields from Acala and Pima during several years on clean land was 1.8, and on infected land it was 3.25. Injury to Pima cotton was reduced by frequent irrigation during seedling growth, especially with the addition of one part of ammonium sulphate in 10,000 of water. King found that heavy applications of ammonium compounds, calcium cyanamide and organic fertilizers were beneficial, and that, in Arizona, clean fallowing for 3 to 4 years with frequent deep tillage in summer nearly eradicated nematodes. Re-infection was rapid. A rotation of cotton and alfalfa for 2 to 3 years each was a practical method of control in some areas.

M.T.F.

#### 610—Plant Disease Reporter. Supplement.

- a. TYLER, J., ed., 1938.—“Proceedings of the Root-Knot-Nematode Conference held at Atlanta, Georgia, February 4, 1938.” No. 109, 133-151.
- b. BARRONS, K. C., 1938.—“Varietal differences in resistance to root-knot in economic plants.” [Paper presented at the above Conference.] No. 109, 143-151.

(610a) Recent progress in methods of combating *Heterodera marioni* are discussed. Of soil fumigants, chloropicrin is considered the most satisfactory. Increase in organic matter of the soil has been shown to build up populations of mites, fungi and nematodes which prey on *H. marioni*, while variations in cultural practice have in some cases proved advantageous. The importance of noting plant species and varieties resistant to attack is emphasized, and varieties showing toleration of the parasite are also considered of economic importance.

M.J.T.

(610b) Barrons lists 30 plant species which have been reported to include varieties showing some degree of resistance to root-knot. He points out that in many cases larvae enter the roots of these varieties freely but gall formation does not ensue. The economic potentialities of resistance are noted in each instance.

M.J.T.

#### 611—Polska Gazeta Lekarska.

- \*a. LANDAU, A., DELOFF, L. & BRAUN, R., 1938.—[Right diaphragmatic hernia; nonspecificity of Casoni reaction for echinococcosis.] 17, 696-700.
- \*b. RUBIN, R., 1938.—[Poisoning or death from natural causes? Ascarides in abdominal cavity.] 17, p. 985.

#### 612—Polski Przegląd Radiologiczny.

- a. KOWALSKA-ŚMIGIELSKA, A., 1938.—“Kystes hydatiques calcifiés du foie.” 13 (1/2), 139-144. [In Polish: French summary p. 6.]

#### 613—Prensa Médica Argentina.

- a. SCHENA, A. T., 1938.—“Quiste hidático del bazo. Consideraciones técnicoquirúrgicas.” 25 (40), 1848-1858.
- b. CALCAGNO, B. N. & MANFREDI, F. J., 1938.—“Tratamiento de los quistes hidatídicos del pulmón con pleura libre.” 25 (42), 1940-1960.

\* Original not available for checking or abstracting.

## 614—Presse Médicale.

- a. PAGNIEZ, P. & PLICHET, A., 1938.—“ Considérations sur l'épilepsie parasitaire.” 46 (48), 937-939.
- b. GUIBAL, P., 1938.—“ La ponction exploratrice des kystes hydatiques du foie est dangereuse.” 46 (53), 1059-1060.
- c. FÈVRE, M., 1938.—“ Les occlusions intestinales d'origine vermineuse.” 46 (82), 1509-1511.
- d. REMLINGER, P., CABANIÉ, G. & BAILLY, J., 1938.—“ Infection vésicale mixte à *Bilharzia haemat. ja* et à *Balantidium coli*.” 46 (94), 1730-1731.
- e. MAKKAS, M., 1938.—“ Sur le traitement des kystes hydatiques du poumon.” 46 (102), 1884-1886.

## 615—Proceedings of the 42nd Annual Meeting of the United States Live Stock Sanitary Association.

- a. ACKERT, J. E., 1938.—“ Newer knowledge of poultry parasites.” pp. 197-208.

(615a) Ackert reviews the more recent advances made in our knowledge of both protozoan and helminthic parasites of poultry. New intermediate hosts for tapeworms and roundworms are mentioned, also the effect of tapeworms on haemoglobin percentage and blood sugar content and the influence of food factors on host resistance. The increase in the number of goblet cells in the small intestine as the chicken gets older is considered as a possible factor in age resistance to nematodes. D.O.M.

## 616—Proceedings of the Imperial Academy (of Japan).

- a. ASAHINA, Y. & MOMOSE, T., 1938.—“ Über ein Santonin-Derivat, welches unmittelbar wurmtreibend wirkt.” 14, 112-114.

(616a) The active centre of the santonin molecule as an anthelmintic has previously been attributed to the lactone ring. The aromatic desmotropes being inactive, Asahina & Momose conclude that the activity resides in the unsaturated ring, which is first oxidised in the host's body to a quinol. *Hyposantonyl quinol* was therefore prepared and, as expected, proved lethal to ascarids. If santonin was fed to dogs a substance was found in the gall bladder having very similar colour reactions. A much simpler compound containing the same arrangement is *tetralyl quinol* which the authors synthesized. As expected it proved active, but clinically the *acetate* was better, being innocuous to man in doses (25 to 500 mg.) which caused rapid expulsion of ascarids. With these quinols there is no time-lag since there is no need for the preliminary oxidation. C.T.C.

## 617—Proceedings of the Indiana Academy of Science.

- a. CABLE, R. M., 1938.—“ Cercariae of Indiana. I. A preliminary note on larval trematodes from McCormick's Creek with descriptions of three new species.” [Abstract of a paper presented at the 53rd Annual Meeting of the Indiana Academy of Science.] 47, 227-228.
- b. STEEN, E. B., 1938.—“ A note on a phyllodistome trematode from the urinary bladder of the miller's thumb, *Cottus* sp.” [Abstract of a paper presented at the 53rd Annual Meeting of the Indiana Academy of Science.] 47, p. 228.

(617a) Cable records 9 species of cercariae from aquatic gastropods, including *Cercaria spinosostoma* n. sp., *C. trichocephala* n. sp. and *C. abbreviastyla* n. sp. The new species are briefly described and differentiated.

A.E.F.

(617b) Steen describes *Phyllodistomum* sp. from *Cottus* sp. in Indiana. 11% of the fish collected were infected, and up to 5 specimens were found in a single fish.

A.E.F.

#### 618—Proceedings of the National Academy of Sciences, India.

- a. CHATTERJI, R. C., 1938.—“Annotated list of the helminths recorded from domesticated animals of Burma. Part I. Trematoda.” 8 (4), 93-104.
- b. PANDE, B. P., 1938.—“On two new trematodes from Indian cyprinoid fishes with remarks on the genus *Allocreadium* Looss.” 8 (4), 110-115.
- c. PANDE, B. P., 1938.—“A new strigeid trematode of the genus *Crassiphiala* v. Haitzma, 1925 (family: Diplostomidae Poirier) from an Indian king-fisher.” 8 (4), 116-119.

(618a) This up-to-date list of the trematodes of domesticated animals of Burma contains 24 species. Chatterji feels that there is no justification for differentiating *Eurytrema dajii* from *E. pancreaticum*, or *Testifrons cristata* from *Paryphostomum sufraginifex*. *Echinostomum revolutum* and *Catantropis verrucosa* in ducks, *Paramphistomum explanatum* in cattle and buffaloes, and *Gastrodiscoides hominis* in pigs are recorded for Burma for the first time but no case of *Gastrodiscoides* has yet been reported from man. As the *Cercaria indicae* XXVI of Sewell when fed to goats gave young *Cotylophoron cotylophorum*, Chatterji considers *Paramphistomum indicum* to be a synonym of *C. cotylophorum*.

R.T.L.

(618b) Pande describes *Allocreadium schizothoracis* n. sp. from *Schizothorax micropogon*, and *A. mahaseri* n. sp. from *Barbus tor*.

E.M.S.

(618c) *Crassiphiala stunkardi* n. sp. is described from the small intestine of *Halcyon smyrensis fusca*.

E.M.S.

#### 619—Proceedings of the National Institute of Sciences of India.

- a. IYENGAR, M. O. T., 1938.—“Natural parasites of mosquitoes in India.” 4 (2), 237-239.

(619a) In a brief discussion of parasites of Indian mosquitoes, Iyengar mentions trematode larvae and mermithids. The former he considers to be unimportant, but mermithids give rise to considerable mortality, and the question of their use for biological control is raised.

A.E.F.

#### 620—Proceedings of the Oklahoma Academy of Science.

- a. SEAMSTER, A., 1938.—“Gill trematodes from Oklahoma fishes.” 18, 13-15.

(620a) Seamster examined 61 catfish and sunfish collected near Stillwater, Oklahoma, and found 12 species of Tetraonchinae belonging to 5 genera. 28% of the fish were infected. A new species of *Haploclleidus* which was among those found is to be described later.

A.E.F.



**621—Proceedings of the Zoological Society of London. Series B. Systematic and Morphological.**

- a. HAMERTON, A. E., 1938.—“Report on the deaths occurring in the Society's Gardens during the year 1937.” 108 (3), 489-526.

**622—Profilassi.**

- \*a. VALCARENGHI, E., 1938.—“Cisticercosi cerebrale del suino; studio clinico ed anatomo-patologico.” 11, 62-75.

**623—Publicações Medicas. São Paulo.**

- \*a. SILVA, E. C., 1938.—“A xistosomose de Manson-Pirajá da Silva; novos dados sobre sua disseminação no município de Bomfim estado da Baía, Brasil; rápidas considerações à sua terapeutica.” 10, 9-18.

**624—Publications of the Carnegie Institution of Washington.**

- a. SANDGROUND, J. H., 1938.—“Helminthic infections of man in Guatemala.” In: Shattuck, G. C. et al., “A medical survey of the Republic of Guatemala.” No. 499, pp. 209-221.

(624a) Sandground has collected facts from published literature and has added interesting commentaries on the light the facts throw on the racial origin of the Guatemalan Indian and the invasion of the country in more recent times by alien races.

R.T.L.

**625—Publications of the South African Institute for Medical Research.**

- a. PORTER, A., 1938.—“The larval Trematoda found in certain South African Mollusca with special reference to schistosomiasis (bilharziasis).” 8, No. 42, 492 pp.

(625a) Miss Porter's monograph of 492 pages is a remarkable contribution to our knowledge of cercariae and is based on an examination of 28 species of fresh-water molluscs of South Africa, where they were collected. The seasonal infestations of molluscs and the symptoms shown by infected molluscs are described. Special attention is paid not only to the transmitters of human schistosomes in South Africa, but also to their morphology and development, their geographical distribution, reservoir hosts and their control. 104 different cercariae, of which all except 12 are new to South Africa, are described as new species. There are chapters on the susceptibility and immunity of molluscs to infection with larval trematodes, the susceptibility of vertebrates to infection with larval trematodes, some effects of trematode infestation on the molluscan host, and the geographical affinities of some of the South African cercariae. The work concludes with a valuable list of references.

R.T.L.

\* Original not available for checking or abstracting.

**626—Quaderni di Radiologia.**

- \*a. CESARINI, M., 1938.—“L'epatografia con thorotrast nella diagnosi di cisti d'echinococco e di tumore del fegato.” 2, 335-351.
- \*b. AGATI, D. & GOGGI, M., 1938.—“Cisti da echinococco obsoleta del peritoneo a caratteri atipici.” 2, 384-392.

**627—Queensland Agricultural Journal.**

- a. ROBERTS, F. H. S., 1938.—“Roundworm in pigs.” 50 (6), p. 762.

**628—Radiologia Medica.**

- a. GARRETTO, U., 1938.—“Sul quadro radiologico della cisticercosi muscolare non calcificata.” 25 (8), 697-711.

**629—Rassegna Italiana d'Ottalmologia.**

- a. SIOTTO, G., 1938.—“Cisti d'echinococco suppurata dell'orbita.” 7, 70-88.

**630—Records of the Indian Museum.**

- a. BAER, J. G., 1938.—“On the anatomy and systematic status of *Cleistogamia holothuriana* Faust, 1924.” 40 (2), 159-168.
- b. CHATTERJI, R. C., 1938.—“On a new genus of amphistomes (Trematoda) from a siluroid fish of Rangoon.” 40 (4), 337-340.

(630a) Baer has studied the anatomy of *Cleistogamia holothuriana* which Faust (1924) had placed among the trematodes. He places the genus *Cleistogamia* with the parasitic rhabdocoelid Turbellaria in the family Umagillidae. In an addendum he refers to *Loutfia loutfia* Khalil & Azim, 1937, which these authors originally placed in Faust's *Cleistogamiidae*. Baer does not accept *Loutfia* as a synonym of *Cleistogamia* as the vitellaria are very differently distributed.

R.T.L.

(630b) In a silurid fish *Pangasius pangasius* Chatterji has found a larval *Ascaris capsularia*, a *Cucullanus*, a *Paranisakis* and a *Goezia*. The specific identity of these could not be determined owing to paucity of material. There were also specimens of a new amphistome named *Maccallumia burmanica* n. g., n. sp. The genus resembles *Dadaytrema*, differing chiefly in the extent of the vitellaria and the presence of a long cylindrical and muscular pharynx. *Cladorchis pangasii* is transferred to this new genus.

R.T.L.

**631—Rendiconti dell'Istituto di Sanità Pubblica.**

- a. GIOVANNOLA, A., 1938.—“Schistosomiasi intestinale da *S. mansoni* nell'Harar e sua trasmissione.” 1, 805-810.
- \*b. PENSO, G. & PANTALEONI, M., 1938.—“L'Istituto di Sanità Pubblica alla mostra autarchica del minerale italiano.” 1, 923-930.

(631a) Giovannola's paper, recording 2 cases of *Schistosoma mansoni* from Harar, Abyssinia, is mainly a verbatim reprint of his 1937 paper [see Helm. Abs., Vol. VI, No. 227a], except that the snail artificially infected is called *Planorbis adowensis* and new photographs of it are given.

B.G.P.

\* Original not available for checking or abstracting.

**632—Report. British Association for the Advancement of Science.**

- a. CAMERON, T. W. M., 1938.—“Some fish-carried trematodes in Canada.” [Abstract.] 108, 426-427.

**633—Report (12th) of the Memorial Ophthalmic Laboratory, Giza.**

- a. ANON, 1938.—“Neuro-retinitis (probably bilharzial in origin).” Year 1937, pp. 88-89.

**634—Report. Scottish Marine Biological Association.**

- a. KING, L. A. L., 1938.—“Marine nematodes.” Year 1937-38, pp. 10-13.

(634a) King lists 13 species of marine nematodes which have been found in the Clyde sea area. Other specimens were also found which have not been identified. A.E.F.

**635—Report (50th). Texas Agricultural Experiment Station.**

- a. BOUGHTON, I. B. & HARDY, W. T., 1938.—“Stomach worms (*Haemonchus contortus*) of sheep and goats.” Year 1937, pp. 267-269.

**636—Résultats des Campagnes Scientifiques Accomplies par le Prince Albert I de Monaco.**

- a. POUCHET & BEAUREGARD, 1938.—“Note sur les parasites du cachalot.” Fasc. 97, 81-82.

(636a) Pouchet & Beauregard have recovered from a sperm whale an unidentified trematode (probably a monostome) and an ascarid. A.E.F.

**637—Revista de la Asociación Médica Argentina.**

- \*a. ROMANO, N., EYHERABIDE, R. A. & PAMPLIEGA, E., 1938.—“Quistes calcificados del bazo.” 52, 772-776.  
\*b. ITOIZ, O. A., 1938.—“Es la cuticular hidática una formación exclusivamente parasitaria?” 52, 931-935.  
\*c. GIROTTO, R. & NACIF, V., 1938.—“El signo de la copa.” 52, 1052-1053.

**638—Revista de Biología e Higiene.**

- a. VIEIRA DE BARROS, N., 1938.—“Nota sobre o achado de *Schistosoma mansoni* na cavidade intestinal, em casos de autopsia.” 9 (1), 6-7. [English summary p. 7.]

**639—Revista Chilena de Higiene y Medicina Preventiva.**

- \*a. NEGhme RODRÍGUEZ, A., 1938.—“Encuesta sobre amebiasis y otras enteroparasitosis en los conscriptos de la III guarnición militar (Concepción).” 1, 367-369.

\* Original not available for checking or abstracting.



640—Revista de Chirurgie si Bulletins et Mémoires de la Société de Chirurgie de Bucarest.

- \*a. BALCOU, S., 1938.—“Fistule biliaire consécutive à une kyste hydatique intraparenchymateux suppuré. Cholérage abondante persistente.” 41, 369-375.
- \*b. BURGHELE, T., BORA, A. & NITESCO, R., 1938.—“Considérations sur le traitement des kystes hydatiques du foie ouverts dans les voies biliaires.” 41, 905-914.

641—Revista de la Facultad de Medicina. Bogotá.

- \*a. RESTREPO, J. M., 1938.—“Manifestaciones aberrantes de las verminosis.” 7, 155-161.
- \*b. GROOT, H., 1938.—“Frecuencia con que se encuentran los huevos infecundos de *Ascaris lumbricoides*.” 7, 162-166.

642—Revista de Gastro-Enterología de México.

- a. BUSTOS, A., 1938.—“Parasitosis intestinal.” 3 (14), 75-94.

643—Revista Médica de Yucatán.

- \*a. MAGAÑA EROSA, P., 1938.—“*Ascaris lumbricoides*. Relato de algunos casos raros.” 19, 235-239.
- \*b. PENICHE CANTÓN, R., 1938.—“Sobre dos casos de *Himenolepis diminuta*.” 20, 36-38.

644—Revista de Medicina y Cirugía de la Habana.

- \*a. ROBERTS, H., 1938.—“El parasitismo intestinal entre los habituados a las drogas heroicas.” 43, 180-182.
- \*b. PÉREZ VIGUERAS, I. & MORENO BONILLA, A., 1938.—“La fasciolosis hepática en Cuba (con especial referencia a su propagación y profilaxis).” 43, 523-553.

645—Revista de Medicina Tropical y Parasitología, Bacteriología, Clínica y Laboratorio.

- a. BACHMAN, G. W., 1938.—“Factors involved in resistance to worm infections, with special reference to trichinosis.” 4 (3), 121-125. [Also in Spanish pp. 127-131.]
- b. JONES, M., 1938.—“The diagnosis of pinworm infestation.” 4 (3), 147-149.
- c. WRIGHT, W. H. & BRADY, F. J., 1938.—“The treatment of oxyuriasis.” 4 (3), 151-153.
- d. BOZICEVICH, J., 1938.—“The diagnosis of trichinosis by immunological methods.” 4 (3), 155-157.

(645a) Bachman mentions briefly natural immunity and age immunity (a type of natural immunity) in certain worm infections, and then describes more fully the development of an acquired immunity in hogs, as a result of repeated infections with *Trichinella*. In such acquired immunity there is a lack of circulating antibodies and reduction of eosinophils in the blood

\* Original not available for checking or abstracting.

stream, and the immunity appears to be a localized one produced by accumulation of antibodies and reticulo-endothelial cells in the intestinal wall forming a barrier against penetration of the larvae. V.D.V.S.

(645d) Bozicevich describes briefly the technique of the dermal (scarification), intradermal and precipitin tests for trichinosis, and the factors conditioning their use and interpretation. Diagnosis should not be based on these methods only, which must be taken in conjunction with clinical symptoms, case histories and other indicators. V.D.V.S.

**646—Revista Médico-Quirúrgica de Patología Femenina.**

- \*a. FOX, E. A. & PEIRANO, A. A., 1938.—“Quiste hidático del cuerpo tiroides.” 12, 137-141.
- \*b. CIRIO, C. R. & MURRAY, E. G., 1938.—“Quiste hidático de la glándula tiroides.” 12, 536-543.

**647—Revista de Pediatrie și Puericultură.**

- \*a. AVRĂMOIU, P. & ANTONESCU, C. V., 1938.—[Erythema nodosum as parallergic manifestation in connection with 2 patients recovered after elimination of ascarides.] 2, 242-246.

**648—Revistă Sanitariă Militară. București.**

- \*a. LUPULESCU, I. I. & PAULIAN, V., 1938.—[Cerebral cysticercosis of meningeal form.] 37, 289-297.
- \*b. IGNA, N., FISI, V. & POPESCU, I. C., 1938.—[Case of primary echinococcosis of heart complicated by secondary local echinococcosis of pericardium.] 37, 636-643.

**649—Revista del Trabajo.**

- \*a. AGUIRRE PEQUEÑO, E., 1938.—“Introducción al estudio de la ancylostomosis de los mineros como enfermedad profesional.” 3, 83-116.

**650—Revue Française de Puériculture.**

- \*a. LAVIER, G., 1938.—“Les helminthiases congénitales.” 5, 153-167.

**651—Revue de Médecine et d'Hygiène Tropicales.**

- a. ARIF, M., 1938.—“Un cas de distomatose humaine à *Fasciola hepatica* et trois cas d'anguilluloses à Zonguldak (Turquie).” 30 (6), 346-350.

**652—Revue de Médecine Vétérinaire.**

- a. MAROTEL & GRATECOS, 1938.—“Apparition soudaine, en France d'une parasitose exotique l'amphistomose bovine. Urgence de l'enrayer.” 90, 398-401.
- b. PARLIER, 1938.—“La ladrerie bovine à Dakar.” 90, 504-515.
- c. FLORIO, R. & BENOIT, J., 1938.—“Sur un cas d'insuffisance hépatique par échinococcose chez le cheval.” 90, 516-521.

\* Original not available for checking or abstracting.

(652a) [This paper appeared originally in Bull. Acad. Méd., 1938, 119, 408-410. See Helm. Abs., Vol. VII, No. 85a.]

(652b) Cysticerci constitute the only important grounds for the rejection of carcasses at meat inspection in Dakar, where Parlier finds 2% of the cattle infested. He recommends: tightening up the meat inspection methods, the adequate cooking of beef, the use of mutton where raw meat is therapeutically desirable, and the education of the native population in the elements of hygiene.

B.G.P..

#### 653—Revue Médicale de Nancy.

- a. MELNOTTE, P., TRIAL, R. & ROYER, J., 1938.—“Un cas curieux d'ascaridiose.” 66 (11), 489-494.

#### 654—Revue Médico-Chirurgicale des Maladies du Foie, du Pancréas et de la Rate.

- \*a. BOURDE, Y., 1938.—“L'échinococcose hépato-splénique.” 13, 290-296.  
 \*b. FIESSINGER, N. & LEDOUX-LEBARD, G., 1938.—“Un aspect radiologique des kystes hydatiques du foie partiellement calcifiés: l'ombre en arc de cercle. Sa valeur diagnostique.” 13, 339-346.

#### 655—Revue Neurologique.

- a. CONOS, B., 1938.—“Echinococcose vertébrale; paraplégie; 5 opérations dans l'espace de 10 ans.” 69 (5), 534-535.

#### 656—Revue Pratique des Maladies des Pays Chauds.

- a. DIAMANTIS, A., 1938.—“La mort subite en stibiothérapie antibilharzienne et les deductions chimiothérapiques qui en découlent à propos du ‘Fouadin Tolerance Test’ du Prof. Khalil Bey.” 17e Année, 18 (13), 599-604, 607-608, 611-612.

(656a) Diamantis points out that deaths from antimony therapy are always very sudden, without premonitory symptoms, and nothing can be found at autopsy other than an accumulation of the drug in the liver. It is not a question of idiosyncrasy since deaths do not occur before the 5th injection. The Fouadin Tolerance Test is intended to ascertain that the drug is being eliminated satisfactorily through the kidneys, but it is impracticable to use it in the field clinics where mass treatments with Fouadin are given. The result is that many persons are killed by the drug who would probably not have died of schistosomiasis. Diamantis thinks that a treatment using both Fouadin and emetine is preferable.

B.G.P.

#### 657—Revue Suisse de Zoologie.

- a. ALTHERR, E., 1938.—“La faune des mines de Bex, avec étude spéciale des nématodes.” 45 (4), 567-720.

(657a) Altherr, in a comprehensive study of the fauna of the mines of Bex in Switzerland, has found that nematodes comprise an important part of

\* Original not available for checking or abstracting.



the animal population and describes the following as new to science, namely : *Trilobus murisieri* n. sp., *Rhabditis heteruroides* n. sp., *R. coroniger* n. sp., *Cephalobus paralongicaudatus* n. sp., *Cyatholaimus ambiguus* n. sp., *Diplogaster macrospiculum* n. sp., *D. obscuricola* n. sp., *D. tenuipunctatus* n. sp., *D. quadridentatus* n. sp. and *D. curvidentatus* n. sp. T.G.

#### 658—Revue de Zoologie et de Botanique Africaines.

- a. VUYLSTEKE, C. & RODHAIN, J., 1938.—“*Dirofilaria schoutedeni* n. sp. de *Colobus polykomos uelensis*.” 30 (3), 356-360.

(658a) Vuylsteke & Rodhain describe and figure *Dirofilaria schoutedeni* n. sp. from *Colobus polykomos uelensis*. A table compares the distinctive characters of the new species with those of *D. repens* (which it most nearly resembles), *D. genettæ*, and *D. corynodes*. A.E.F.

#### 659—Rhodesia Agricultural Journal.

- a. COLLINS, J. C., 1938.—“Tobacco eelworm (*Heterodera marioni*). Report on farmers' replies to questionnaire.” 35 (4), 264-278.  
 b. COLLINS, J. C., 1938.—“Nematode investigations.” In: “Report of the Tobacco Research Board for the year December 31st, 1937.” 35 (6), 431-438.  
 c. COLLINS, A. D., 1938.—“Eelworm in tobacco.” 35 (6), 448-451.

(659a) The replies of 153 Rhodesian farmers to a questionnaire on the tobacco root-knot problem indicate that *Heterodera marioni* is widespread in the tobacco growing areas of Southern Rhodesia, and in some places is rapidly spreading. Infestation is thought to arise from infected river water, indigenous weed hosts and infected garden refuse. Methods found by individual farmers to reduce or hinder infestation include frequent ploughing, fallowing, burning, and control of drainage water and infected refuse.

M.T.F.

(659b) Collins concludes that water from boreholes and wells does not contain *H. marioni* but that river water may be infective when it is contaminated with mud from the banks. He suggests that water for tobacco seed-beds should be drawn from the centre of the stream with the aid of pumps or bridges. Chemical treatments of river water were unsuccessful, but filtering through 30 inches of coarse sand rendered it harmless. Soil treatments with barium fluosilicate (11 oz. per 16 square yards), Seekay fumigant (1 teaspoonful in holes 18 inches apart) and sodium cyanide (600 lb. per acre) were unsuccessful. As trap-crops sunflower, Kaffir beans and tobacco were useful, the first being the most satisfactory. Lists are given of crop plants and weeds which were found to be attacked and crops not attacked. Munga [*Pennisetum typhoideum*, pearl millet] is reported as a host for the first time and maize for the first time in Rhodesia.

M.T.F.

(659c) A. D. Collins gives his observations, as a grower, on the root-knot problem of tobacco in Rhodesia. He finds that infested land fails to produce a good yield of maize, though he found no galls on this crop. Tobacco seed-beds watered with river water before the flood water came down, or with spring water, remained clean. A satisfactory yield of tobacco was obtained with special cultivation methods which involved the planting of

each plant in a small hill of soil instead of in a ridge. The method, which is described in detail, reduced early infection and the spread of eelworm from plant to plant. The yield was satisfactory though the cured tobacco was somewhat light in colour.

M.T.F.

#### 660—Riforma Medica.

- a. FLAMINI, S., 1938.—“Contributo allo studio delle perforazioni intestinali da ascaridi.” 54 (44), 1701-1703.

#### 661—Rinascenza Medica.

- a. LUCIA, R. DE, 1938.—“Studio clinico sull-anchilostomiasi.” 15 (14), 480 & 483.
- b. MENNONNA, G., 1938.—“Di un caso di bilharziosi intestinale in un nazionale reduce dall'A.O.” 15 (17), 584 & 587.
- c. SCIACCA, F., 1938.—“Cisti d'echinococco apertasi nelle vie biliari.” 15, (23), 799-800.

#### 662—Rivista di Chirurgia.

- a. BAIOCCHI, P., 1938.—“Sulle cosi dette ‘cisti solitarie’ da echinococco del peritoneo. (Contributo clinico, radiologico ed anatomo-patologico).” 4 (8), 373-389.

#### 663—Rivista di Parassitologia.

- a. GIOVANNOLA, A., 1938.—“Osservazioni sui gasteropodi della Sardegna d'importanza medica e veterinaria.” 2 (2), 111-120.

(663a) In Sardinia the following molluscan species of medical or veterinary importance are reported by Giovannola: (i) *Limnaea palustris* var. *vulnerata* and *L.p.* var. *sicula*. This species is stated to be the common intermediate host of *Fasciola hepatica*. It is abundant on the Rio Ottava and also occurs near Cagliari on the Rio Cixerri. Of 229 examples (including both varieties) 15 contained the cercaria of *F. hepatica*. (ii) *Bullinus contortus* var. *saeprusanus*. This species is the intermediate host of *Schistosoma bovis* endemic in the island and a potential host of *S. haematobium* not yet reported there. Its distribution is restricted so far as is at present known to the west side of the island at Siniscola on the Rio di Siniscola, Orosei on the Rio Cedrino and Tortoli on the Rio Fordeddu. A second species of *Bullinus*, viz., *B. hemprichii* was found at Orosei. The other molluscs recorded are *Limnaea limosa*, *Planorbis planorbis*, *Bulimus tentaculatus*, *Theodoxus meridionalis* and *Valvata piscinalis*.

R.T.L.

#### 664—Rivista di Patologia Nervosa e Mentale.

- a. CANZIANI, G. & NOBILE, A., 1938.—“Due casi di cisticercosi cerebrale diagnosticati in vita.” 51 (1), 55-84.

#### 665—Sang.

- a. POINSON, R. & HAWTHORN, E., 1938.—“Kyste hydatique du foie avec suppuration secondaire post-opératoire; purpura orthostatique; splénomégalie.” 12 (3), 347-350.

## 666—Scientific Agriculture.

- a. CHAPMAN, L. J., 1938.—“Oat nematodes on winter wheat.” 18 (9), 527-528.

(666a) Chapman records severe damage caused by *Heterodera schachtii* to winter wheat growing on land infected with the oat strain of the eelworm. The disease was observed in the spring following a very mild winter on wheat sown unusually early in the autumn. All winter wheat growing on infected land in the district was not damaged. The causes of the outbreak could not be determined. M.T.F.

## 667—Scientific Monthly. New York.

- a. SCHWARTZ, B., 1938.—“Animal parasites transmissible to man.” 47, 400-410.

## 668—Semana Médica.

- \*a. REYES, jr., M. & DERQUI, M. M., 1938.—“Quiste calcificado de hígado a forma pseudolitiásica.” Year 1938, 1, 598-600.  
 \*b. SPOTA, B. B. & ALURRALDE, A. J., 1938.—“Síndrome de ‘cola de caballo’ e hidatidosis múltiple.” Year 1938, 1, 607-609.  
 \*c. DÉVÉ, F., 1938.—“Le signe radiologique de la ‘calotte aérienne’ n’est pas rigoureusement pathogénomonique du kyste hydatique du poumon.” Year 1938, 1, 1081-1088.  
 \*d. STEINBERG, I. R. & ABBATE, E. A., 1938.—“Seudo-intoxicación tuberculosa por oxiuriasis.” Year 1938, 2, 490-493.  
 \*e. CASTRO, C. A., 1938.—“Coleperitoneo hidático por quiste supurado roto espontáneamente en cavidad abdominal.” Year 1938, 2, 505-508.

## 669—Sowjetskaja Veterinarija.

- \*a. SCHULZ, R. S., 1938.—[Control of metastrongylosis in pigs.] No. 2, p. 49. [In Russian.]  
 \*b. NOSIK, A. F., 1938.—[The length of life of *Echinococcus granulosus* in the dog.] No. 3, p. 64. [In Russian.]

## 670—Studium.

- \*a. MAZZITELLI, M., 1938.—“La cura dell’anchilostomiasi. (Nota preventiva).” 28, 97-99.

## 671—Texas State Journal of Medicine.

- \*a. WRIGHT, H. E. & MOURSUND, W. H., 1938.—“Study of incidence of intestinal parasites in 2,800 persons in Dallas, Texas and vicinity.” 34, 292-295.

## 672—Transacciones Societatis Pathologicae Japonicae.

- a. YOKOGAWA, S., 1938.—“Investigation on the mode of transmission of *Wuchereria bancrofti*. (Preliminary report.)” 28, 619-624.  
 b. HASHIMOTO, S., 1938.—“A patho-histological research on the ovarium of dogs infected with *Dirofilaria immitis*. (I. Report.)” 28, 624-627.  
 c. TAKAHASHI, M. & ANAN, M., 1938.—“On the splenogenous development of anaemia due to *Ancylostoma duodenale*.” 28, 639-642. [In Japanese.]

\* Original not available for checking or abstracting.



(672a) Cyclops swallow and digest mature larvae of *Dirofilaria immitis* in water. Large numbers of infective larvae of *D. immitis* were fed to a young monkey but could not be recovered at a post-mortem examination of the intestine two hours later. The *F. bancrofti* infection rate of 569 persons living on the Ishigaki Island, Okinawa Prefecture, was ascertained to be 28.5% while the infection rate of 298 mosquitoes (221 culicines and 77 anophelines) was less than 1%, only 2 culicines showing any infection. No evidence was obtained that fleas were capable of acting as intermediate hosts of *F. bancrofti*. In the subcutaneous tissues of the abdominal wall of a mouse which had been shaved and scratched before the application of mature filaria larvae these larvae were subsequently found in microscopical sections. In another experiment larvae were also found penetrating the tissues from the skin after the mice had been bitten by infected mosquitoes. Yokogawa is of opinion that in nature the filaria larvae can penetrate the skin only through areas of skin broken by the bites of mosquitoes and not through the healthy skin as suggested by Fülleborn. [See also above No. 557a and Helm. Abs. Vol. VIII, No. 66g.]

R.T.L.

#### 673—Transactions of the Hawaii Territorial Medical Association.

- \*a. ALICATA, J. E., 1938.—“Parasitology and its relation to public health in Hawaii.” 1938, pp. 177-184.

#### 674—Transactions of the Kansas Academy of Science.

- a. CAUTHEN, G. E., 1938.—“Occurrence of *Capillaria* (Nematoda) in a colony of pigeons, and methods of control.” 40, p. 367.
- b. ACKERT, J. E. & CASE, A. A., 1938.—“Susceptibility of mature chickens to tapeworm infections.” 41, 299-302.

(674a) Cauthen records an outbreak of *Capillaria columbae* infection in a colony of pigeons in 1931. Carbon tetrachloride and hexylresorcinol failed to remove the worms, but the cleansing of pens containing young pigeons every 10 days resulted in very few pigeons showing infection in 1932 and none at all in 1933.

A.E.F.

(674b) Ackert & Case find it is possible to infect 225-days-old fowls with *Raillietina cesticillus*. Two of these birds began to pass ripe proglottids in the faeces 12 days after experimental feeding, and one of these has been kept alive and is still passing segments 272 days after feeding. One of the experimental birds showed some resistance to infection, for development was very slow and ripe segments were not extruded until 85 days after experimental feeding.

P.A.C.

#### 675—Transactions of the Ophthalmological Society of the United Kingdom.

- a. KAY, B., 1938.—“*Cysticercus cellulosae* in the vitreous.” 58, 794-799.

\* Original not available for checking or abstracting.

## 676—Transactions of the Royal Canadian Institute.

- a. FALLIS, A. M., 1938.—“A study of the helminth parasites of lambs in Ontario.” 22 (1), 81-128.

(676a) Fallis examined 144 lambs from various parts of Ontario over a period of 15 months. He has worked out the distribution of the parasites within the host, degree of infestation, seasonal variation and geographical distribution of the 19 species of helminths recovered. Incidence and degree of infestation was highest with *Haemonchus*, *Ostertagia*, *Trichostrongylus*, *Strongyloides*, *Nematodirus* and *Cooperia*.  
A.E.F.

## 677—Transactions of the Royal Society of South Australia.

- a. JOHNSTON, T. H. & CLELAND, E. R., 1938.—“Larval trematodes from Australian terrestrial and freshwater molluscs. Part III. *Leucochloridium australiense* n. sp.” 62 (1), 25-33.  
b. JOHNSTON, T. H. & MAWSON, P. M., 1938.—“An account of some filarial parasites of Australian marsupials.” 62 (1), 107-121.  
c. JOHNSTON, T. H. & CLELAND, E. R., 1938.—“Larval trematodes from Australian terrestrial and freshwater molluscs. Part IV. *Cercaria (Furcercaria) murrayensis* n. sp.” 62 (1), 127-131.  
d. JOHNSTON, T. H., 1938.—“A census of free-living and plant-parasitic nematodes recorded as occurring in Australia.” 62 (1), 149-167.  
e. JOHNSTON, T. H. & MAWSON, P. M., 1938.—“Strongyle nematodes from central Australian kangaroos and wallabies.” 62 (2), 263-286.

(677b) Four new filarial species are described: *Dipetalonema dasyuri* from *Dasyurus viverrinus*, *D. rarum* and *D. annulipapillatum* from *Onychogale frenata*, *D. tenue* from *Macropus robustus*. An account is given of *D. roemeri*, *D. spelaea* and *D. trichosuri*. The filarial parasites studied were collected from 16 species of marsupials.  
R.T.L.

(677c) *Cercaria murrayensis* n. sp., a *Proalaria* larva, is one of the commonest larval trematodes in *Limnaea lessona*. It occurs in sporocysts.  
R.T.L.

(677d) Johnston has brought together under one classification the records of the free-living and plant-parasitic nematodes in Australia. The classification used is based mainly on the recent contributions of Filipjev (1934) and of Chitwood & Chitwood (1937), and includes the free-living—terricolous, fresh-water and marine—and the plant-parasitic nematodes. Most of the knowledge available was contributed by the late N. A. Cobb during his time in Australia and was published by the Department of Agriculture in New South Wales from 1890 to 1902. Miss Irwin-Smith in 1917 (1918) published a paper on some species of Chaetosomatidae from the coast near Sydney, whilst Allgén in 1927 described a number of Tasmanian marine species. The nematode which passes first through a free-living stage, with males and females, in leaf-galls of Eucalyptus trees, associated with an agromyzid fly, and then through a parasitic female generation in the body cavity of the gall flies, has been described by Currie in 1937. The references other than these chiefly refer to the occurrence of the important plant-parasitic species of the genus *Heterodera*.  
M.R.Y.

(677e) Johnston & Mawson list the following new bursate nematodes in Australian marsupials: (i) in *MACROPUS ROBUSTUS ERUBESCENS*; *Labiostrongylus macropodis*, *L. grandis*, *Cloacina minor*, *C. parva*, *C. communis*, *C. frequens*, *C. macropodis*, *C. dubia*, *C. australis*, *C. magna*, *C. curta*: (ii) in *MACROPUS RUFUS*; *Cloacina minor*, *C. petrogale*, *C. hydriformis*, *C. liebigi*, *C. inflata*. (iii) in *PETROGALE LATERALIS*; *Pharyngostromylus alpha*, *P. beta*, *Labiostrongylus petrogale*, *Cloacina minor*, *C. parva*, *C. macropodis*, *C. petrogale*, *C. hydriformis*, *C. ernabella*, *C. elegans*. *Labiostrongylus longispicularis* Wood is also reported from all the above hosts and from *Macropus isabellinus*.

R.T.L.

### 678—Transactions of the Royal Society of Tropical Medicine and Hygiene.

- a. McMULLEN, W. H. & CRUICKSHANK, J. A., 1938.—“A case of *Filaria bancrofti* in the interior of the eye.” [Demonstration.] 31 (4), 372-373.
- b. LANE, C., 1938.—“Professor F. W. O'Connor's salient achievement in the cause of filarial periodicity, and some factors which helped and hampered him.” [Demonstration.] 32 (1), 10-11.

### 679—Travaux du Musée Zoologique, Kiev.

- a. KULIKOV, N. S., 1938.—“Ueber die Helminthenfauna der Pferde (Dictyocaulose, Probstmayriose und Anoplocephaliden).” No. 21/22, 171-176. [In Russian: German summary pp. 175-176.]
- b. EFIMOV, A. E., 1938.—“Investigation de la faune des vers parasitiques des animaux domestiques carnivores dans la RSS d'Ukraine.” No. 21/22, 177-186. [In Russian: French summary p. 186.]
- c. MALEVITSKA, M. O., 1938.—“Sur la présence de *Metagonimus yokogawai* Katsurada sur le territoire de la RSS d'Ukraine.” No. 21/22, 187-192. [In Russian: French summary p. 192.]
- d. MALEVITSKA, M. O., 1938.—“Sur la présence de *Prohenistomum appendiculatum* Ciurea 1916 (Trematoda) sur le territoire de la RSS d'Ukraine.” No. 21/22, 193-195. [In Russian: French summary p. 195.]
- e. ELPERIN, M. A., 1938.—“Eine neue Nematode der in der Trachee von *Athene noctua* parasitierenden Art *Syngamus* Siebold.” No. 21/22, 197-204. [In Russian: German summary p. 204.]

(679a) Kulikov found *Dictyocaulus arnfieldi* in 31.1% of horses examined in the Ukraine, *Probstmayria vivipara* in 27.1%, *Anoplocephala magna* in 7.5%, *A. perfoliata* in 34.1% and *Paranoplocephala mamillana* in 21.5%. Carbon tetrachloride and turpentine were found to be of use against *Probstmayria vivipara*.

A.E.F.

(679b) Efimov records that in the Ukraine 97.8% of dogs and 100% of cats harbour helminths. From dogs 18 species are reported and from cats 14 species. *Ancylostoma caninum* (52%), *Dipylidium caninum* (44%) and *Uncinaria stenocephala* (35%) were most frequently found in dogs, whilst *Ancylostoma caninum* (50%), *Toxocara mystax* (37%), *Uncinaria stenocephala* (37%) and *Opisthorchis felinus* (37%) were the chief cat parasites.

A.E.F.

(679c) Malevitska has recovered numerous specimens of *Metagonimus yokogawai* from the duodenum of a cat in the neighbourhood of Nikolaiev. *M. yokogawai* metacercariae were found on the scales of 13 species of fishes,



of which the following are recorded as new hosts: *Lucioperca lucioperca*, *Aspius aspius*, *Rutilus rutilus heckeli*, *Leuciscus borysthemicus* and *Vimba vimba*.  
A.E.F.

(679d) Malevitska records *Prohemistomum appendiculatum* from a cat in the neighbourhood of Nikolaév. This is the first record of this parasite from Russia. Young cats fed with the fishes *Leuciscus leuciscus*, *Chondrostoma nasus*, *Pelecus cultratus* and *Rutilus rutilus* developed infection with *P. appendiculatum*.  
A.E.F.

(679e) Elperin describes and figures *Syngamus skrjabini* n. sp. from the trachea of *Athene noctua*. The new species is differentiated from the 5 previously described species of *Syngamus* and a key to the genus is given.  
A.E.F.

#### 680—Travaux de la Réserve d'État d'Astrakhan.

- a. DUBININ, V. B., 1938.—“Changements de la parasitofaune de *Plegadis falcinellus* L. provoqués par l'âge et la migration de l'hôte.” 2, 114-212.  
[In Russian: French summary pp. 210-212.]

(680a) Dubinin records 29 helminths from the ibis, *Plegadis falcinellus*, as a result of a survey of this host in Astrakhan. He found 13 trematodes (including *Strigea plegadis* n. sp., which is described and figured), 9 cestodes and 7 nematodes. The changes in the parasitic fauna of *P. falcinellus* are discussed in their relation to migration, food, age of the host and to seasonal influences.  
A.E.F.

#### 681—Travaux de la Station Zoologique de Wimereux.

- a. JOYEUX, C. & BAER, J. G., 1938.—“Sur quelques cestodes de Galliformes.” 13, 369-389.

(681a) Joyeux & Baer discuss the distribution and host relationships of *Raillietina* (*Skrjabinia*) *cesticillus*. They have found the cysticeroid, in nature, in *Anthicus floralis* and have been able to infect *Alphitophagus bifasciatus*, both tenebrionid beetles, whereas previous records are all from carabids. *Raillietina* (*Skrjabinia*) *circumvallata* var. *cadarachensis* n. var. is described. *Raillietina* (*Raillietina*) *friedbergeri* is reported from the pheasant. The cysticeroid of *Raillietina* (*R.*) *echinobothrida* has been found in ants of the species *Tetramorium caespitum* in an anthill only 3 metres from an infected poultry run.  
E.M.S.

#### 682—Tunisie Médicale.

- \*a. BROC, R., JAUBERT DE BEAUJEU, A. & SLIM, M., 1938.—“Echinococcose généralisée; échinococcose secondaire de la plèvre.” 32, 323-325.

#### 683—Veröffentlichungen des Volksgesundheitsdienstes. Berlin.

- \*a. DEMBOWSKI, H. & SZIDAT, L., 1938.—“Die staatliche Bekämpfung der Eingeweidewürmer bei den Anwohnern des Kurischen Haffes von Mai 1935 bis Ende 1936.” No. 50.

\* Original not available for checking or abstracting.

## 684—Vestnik Khirurgii.

- \*a. ROZHDESTVENSKIY, V. Y., 1938.—[Echinococcic diseases according to data of surgical division of Michurinsk Hospital for 30 years (1906-1936).] 55, 133-138.
- \*b. KRICHEVSKAYA, E. G., 1938.—[Case of suppurating cysticercosis of muscles of thigh.] 55, p. 327.
- \*c. LEVIN, R. I., 1938.—[Case of rupture of echinococcic spleen.] 55, p. 486.
- \*d. KESSEL, F. K., 1938.—[Rare complication of pulmonary echinococcosis.] 55, 611-615.
- \*e. NIKOTIN, M. P., 1938.—[Surgical ascariasis.] 56, 65-70.
- \*f. NAPALKOV, N. I. & KHEYFITS, A. B., 1938.—[Exogenous growth of echinococcus.] 56, 241-244.
- \*g. ROKHKIND, I. M., 1938.—[Helminthic intestinal occlusion.] 56, 570-579.

## 685—Vestnik Oftalmologii.

- \*a. ROZENTSVEYG, M. G., 1938.—[Subcutaneous cysticercosis of eyelids.] 13, p. 270.

## 686—Veterinarski Arhiv.

- a. GANSLMAYER, R., 1938.—“Rezultati terenskih pokusa sa bakrenim sulfatom obzirom na djelovanje na metiljskog puža.” 8 (5), 193-225. [German summary pp. 222-225.]
- b. ERLICH, I., 1938.—“Parazitička fauna pasa s područja grada Zagreba.” 8 (11), 531-571. [German summary pp. 569-571.]

(686a) Ganslmayer describes 57 field experiments with copper sulphate in the control of *Limnaea truncatula* in different habitats in the Zagreb area, designed to standardize the concentration and mode of application of this salt. The salt was best used either in powder form or in strong 1 to 2% solutions sprayed from watering cans or from vineyard sprays. Strong solutions reduce the time required for application, but even using a 2% solution the treatment of swampy ground occupied about 15 hours per hectare, allowing a dose of 30 kg. or more per hectare. In ditches and pools it is necessary to attain a concentration of 1 : 50,000 with clear water and sparse vegetation : under less favourable conditions the concentration may have to be increased to 1 : 5,000. Powder was broadcast on swamps at the rate of 45 kg. per hectare. In many swampy localities copper sulphate treatment is economically impracticable. B.G.P.

(686b) From 100 examinations of dogs in Zagreb, Erlich found all to be carrying helminths. *Trichuris vulpis* in 82% was the commonest, and more than half had *Dipylidium caninum*. Altogether 20 species of helminths were recovered, most dogs having more than one species. He believes he has a new species of *Echinocasmus* but does not describe it or name it. On the basis of the material recovered in this survey he believes there is no essential difference between *Dipylidium caninum* and *D. sexcoronatum*, between *Alaria alata* and *A. americana* or between *Capillaria aerophila* and *Eucoleus aerophilus*. In order to assist in diagnosis, he has worked out a key for the identification of helminth eggs that may be found in dog faeces. Protozoan and arthropod parasites are also surveyed. P.A.C.

\* Original not available for checking or abstracting.

## 687—Veterinary Bulletin. U.S. Army. Washington.

- a. CURLEY, E. M. & HERRING, F. L., 1938.—“The conquest of strongyloidiasis.” **32** (3), 197-206.

(687a) Curley & Herring give the results of their treatment of strongyloid worms in army horses with 8 to 10 c.c. of oil of chenopodium for horses under 1,200 lb., and 16 c.c. for horses over 1,200 lb., with 600 to 700 c.c. linseed oil and 100 to 200 c.c. liquid petroleum after 24 to 36 hours fasting. The method used for diagnosing the degree of infection is included together with a discussion on the prevention of infection from the point of view of stable hygiene. J.W.G.L.

## 688—Videnskabelige Meddeleser fra den Naturhistoriske Forening i Kjøbenhavn.

- a. KREIS, H. A., 1938.—“Papers from Dr. Th. Mortensen's Pacific Expedition 1914-16. LXVIII. Neue Nematoden aus der Südsee.” **101**, 153-181.

(688a) Kreis describes and figures the following new marine nematodes from the South Sea:—*Chaetosoma meridionalis* n. sp., *Draconema meridionalis* n. sp., *D. bandaensis* n. sp., *Richtersiella pilosa* n. sp., *Eudesmoscolex steineri* n. sp., *Tricoma multiannulata* n. sp., *T. aberrans* n. sp. A.E.F.

## 689—Virginia Medical Monthly.

- a. MARTIN, W. B., 1938.—“Incidence and importance of human intestinal parasites in tidewater Virginia.” **65** (10), 585-587.

## 690—Wiadomości Weterynaryjnych.

- a. KWIATKOWSKA, A. & MOŚCICKI, M., 1938.—“Badania statystyczne nad występowaniem w Polsce nicienia *Gongylonema pulchrum* (Molin, 1857).” **17** (214), 186-191. [French summary.]
- b. RAYSKI, C., 1938.—“Przyczynek do znajomości robaków pasożytniczych lisów srebrzystych w Polsce.” **17** (217), 281-290. [French summary p. 290.]
- c. RUNGE, S. & WITKOWSKI, B., 1938.—“Z kazuistyki anatomo-patologicznej.” **17** (218), 305-316. [German summary pp. 314-316.]

(690a) Kwiatkowska & Mościcki have examined the incidence of *Gongylonema pulchrum* in 5 districts of Poland. A total average of 19% was positive but the incidence varied in the different districts from 11.1 to 23%. This is lower than in Italy but higher than in Northern Europe. Morphologically the specimens found were typical for the species. P.A.C.

(690b) The helminths found in 41 silver foxes in Poland were: *Toxocara canis* 73.33%, *T. mystax* 6.6%, *Uncinaria stenocephala* 60%, *Capillaria plica* 2.2% and *Metorchis albidus* 44.44%. R.T.L.

(690c) Among 4 notes on anatomo-pathological cases, contributed by Runge & Witkowski, is one recording a hydatid from the wall of the left heart of a pig. B.G.P.



**691—Wisconsin Medical Journal.**

- a. CARLSON, G. W., 1938.—“An outbreak of trichiniasis in east central Wisconsin. Report of fifteen cases.” 37 (6), 481-484.
- b. EDWARDS, A. C. & BRACKETT, S., 1938.—“A ‘swimmer’s itch’: schistosome dermatitis.” 37 (7), 543-547.

**692—Zeitschrift für Ärztliche Fortbildung.**

- a. MOLLOW, 1938.—“Über die Echinokokkenkrankheit.” [Abstract of paper read before the Berliner medizinische Gesellschaft.] 35, p. 722.

**693—Zeitschrift für Kinderheilkunde.**

- a. FÜSTHY, O., 1938.—“Das Vorkommen von *Enterobius vermicularis* in operativ entfernten und post mortem untersuchten Wurmfortsätzen.” 60 (4), 394-404.

**694—Zeitschrift für Pflanzenkrankheiten (Pflanzenpathologie) und Pflanzenschutz.**

- a. ABRAHAM, R., 1938.—“Mermithiden als Parasiten des Kartoffelkäfers (*Leptinotarsa decemlineata* Say).” 48 (9/11), 507-513.

(694a) Abraham reports the presence of mermithid nematodes in the body-cavity of the potato chafer (*Leptinotarsa decemlineata*) found in Baden, Germany. The worms occurred in the adults, pupae and larvae. Evidence is presented that in parasitized beetles the size of the gonads is reduced. The worms are referred provisionally to the genus *Hexamermis*. T.G.

**695—Zeitschrift für Wissenschaftliche Zoologie.**

- a. LUDWIG, H., 1938.—“Die Variabilität von *Rhabditis teres* (A. Schn.) unter veränderten Ernährungsbedingungen.” [Dissertation, Dresden.] 151 (3), 291-336.

(695a) Ludwig has investigated the variability of numerous morphological characteristics in *Rhabditis teres* cultured on nutrient agar, with and without the addition separately of tannin, caffeine, nicotine, and various plant juices. The characteristics, viz., 13 dimensions and 7 ratios derived from them, are statistically treated and some 100 frequency polygons are reproduced. Variation was estimated from 18 values for females and 14 values for males, in each case. It is shown that both means and standard deviations are displaced by the use of different media, some characteristics showing this feature far more than others; an important example is the increased spicule-length of males in plant-juice media. In any one medium variability may alter in the course of generations. Of systematic value (owing to low variability) are cuticle thickness, length of male tail, and various ratios—excepting  $\alpha$  (total length/greatest breadth). B.G.P.

**696—Zentralblatt für Chirurgie.**

- a. KISSLING, K., 1938.—“Ein Fall von Pleuraechinococcus mit Durchbruch in die Bauchhöhle.” 65 (42), 2325-2327.
- b. BALTIM, W., 1938.—“Peritonitis nach Spontanperforation des Dünndarmes durch ein Askaridenknäuel.” 65 (43), 2365-2367.

## 697—Zoologica. New York.

- a. ARNOLD, jr., J. G., 1938.—“A study of the anoplocephaline cestodes of North American rabbits.” **23** (1), 31-53.
- b. HARTLEY, J., 1938.—“Pathology of *Dirofilaria* infestation. Report of a case with chronic pulmonary arteritis.” **23** (3), 235-246.

(697a) From a systematic review of the North American leporine Anoplocephalidae, which includes illustrated redescrptions and a key to the species, Arnold concludes that they are distinct from the European species and are not properly to be reduced to the synonymy of *Cittotaenia pectinata*, as both Baer and Sprehn have done. The species are: *Schizotaenia americana*, *Cittotaenia perplexa*, *C. variabilis* (the two latter mainly in rabbits), and *C. pectinata americana* (mainly in hares). B.G.P.

## 698—Zoologica Poloniae.

- a. MICHAJŁOW, W., 1938.—“O potrzebie ujednastajnienia metod badania, doryczających Copepoda jako gospodarzy pośrednich tasiemców.” **3** (1), 15-22.
- b. MARKOWSKI, S., 1938.—“O faunie helmintologicznej węgorzycy bałtyckiej (*Zoarces viviparus* L.).” **3** (1), 89-104.
- c. MODRZEJEWSKA, H., 1938.—“O robakach pasożytniczych *Emys orbicularis* L. 2. Polesia Polskiego.” **3** (1), 125-139.

(698a) Michajłow enters a plea for the more detailed and exact reporting of experiments dealing with copepods as cestode intermediaries. He feels that more care should be taken to establish correctly the name and sex of the copepod, the percentage of infection, maximal and average numbers of larvae, degree and rate of development of the larvae, and other data. He divides copepods into 5 groups according to their efficiency as intermediaries.

A.E.F.

(698b) During 1936-37 Markowski examined 564 specimens of *Zoarces viviparus* from the Baltic near Hel and Gdynia, and found 355, i.e. 63%, to harbour helminths. Of the 13 species recorded the following are new for this host: *Gyrodactylus medius*, *Bothriocephalus* sp., *Corynosoma strumosum*, *Echinorhynchus gadi*, *Neoechinorhynchus rutili*, *Caryophyllaeus* sp., *Cystidicola skrjabini*, *Raphidascaris* sp. and *Contracaecum* sp. The last 4 and *Contracaecum aduncum* are described in some detail.

A.E.F.

(698c) Of 100 specimens of the tortoise, *Emys orbicularis*, Modrzejewska found only one to be free from helminths. The following species are recorded from this host: *Astiotrema emydis*, *Cercorchis parvus*, *C. solivagus* (?), *Spirhapalum polesianum*, *Spiroxys contortus* and *Spironoura armenica*. All are described.

A.E.F.

## 699—Zoological Magazine.

- a. OGATA, T., 1938.—“Note préliminaire sur deux espèces nouvelles de trématodes du genre *Astiotrema* provenant de l'*Amyda maackii*.” **50** (1), 50-52.
- b. YAMASHITA, J., 1938.—“A deformity of *Glypthelmins rugocaudata* (Yoshida), a trematode of the frog. II.” **50** (2), p. 107.
- c. IWATA, S. & MATUDA, S., 1938.—“*Ophiotaenia ranarum*, a new amphibian cestode.” **50** (4), 221-222.
- d. YAMAGUTI, S., 1938.—“New generic name *Neodiplotrema*.” **50** (12), p. 541.

(699a) Ogata describes *Astiotrema amydae* n. sp. and *A. fukuui* n. sp. both from the small intestine of *Amyda maackii*. *A. amydae* closely resembles *A. orientale* Yamaguti, differing principally in the size of the eggs. *A. fukuui* resembles *A. amydae* but differs in the comparative size of the suckers: in the former the oral is larger than the ventral but in the latter the reverse is the case.

A.E.F.

(699c) Iwata & Matuda describe and figure *Ophiotaenia ranarum* n. sp. from the intestine of *Rana nigromaculata nigromaculata*. It differs from *O. japonensis* Yamaguti in the number of lateral pouches of the uterus and in the shape of the ovary.

A.E.F.

(699d) *Neodiploptrema* nom. nov. is proposed for *Diploptrema* Yamaguti, 1938 [see Helm. Abs., Vol. VII, No. 341a] which is preoccupied by *Diploptrema* Spencer, 1900.

R.T.L.

### 700—Zoologischer Anzeiger.

- a. SZIDAT, L., 1938.—“*Brachyurus gobii* n. g., n. sp., eine neue Caryophyllaeiden-Art aus dem Gründling, *Gobio fluviatilis* Cuv.” 124 (9/10), 249-258.

(700a) A new caryophyllaeid species is recorded from the gut of *Gobio fluviatilis*. Its systematic position lies between *Biacetabulum* and *Glaridacris*. It is therefore named *Brachyurus gobii* n. g., n. sp. of which the larval form *Archigetes brachyurus* Mrázek is a second species. *Caryophyllaeides femica* is recorded from Germany for the first time.

R.T.L.

### NON-PERIODICAL LITERATURE.

- 701—BARGER, E. H. & CARD, L. E., 1938.—“Diseases and parasites of poultry.” London, 2nd edit., 386 pp.

- 702—BAYLIS, H. A., 1938.—“Helminths and evolution.” In: De Beer, G. R., ed., “Evolution; essays on aspects of evolutionary biology presented to Prof. E. S. Goodrich.” Oxford, pp. 249-270.

- 703—BLACKLOCK, D. B. & SOUTHWELL, T., 1938.—“A guide to human parasitology for medical practitioners.” London, 3rd edit., viii+259 pp.

- 704—DEITERMANN, J., 1938.—“Versuche zur Herstellung von Dauerpräparaten von Parasiteneiern und -larven.” Inaugural-Dissertation, Hannover, 24 pp.

Deitermann has found that, as mounting media for parasite eggs and larvae, serum-glycerine and sugar solution have too marked a clearing action, whereas 4% formalin is satisfactory. Sealing can be effected with lacquer or gold size. The mountant is covered by a small circular coverslip, and this in turn by a large square coverslip, the space between the latter and the slide being filled with lacquer. To avoid the obscuring effect of a thin layer of lacquer between the two coverslips, they are stuck together with Canada balsam prior to use.

B.G.P.



- 705—FRANKEN, T., 1938.—“Untersuchungen über Vorkommen und Bedeutung der Endoparasiten beim Haushuhn im Ablauf eines Jahres.” Dissertation, Giessen, 45 pp.

Franken has examined 604 chickens from farms, small holdings and slaughter houses over a period of a year. *Heterakis gallinae* was the commonest parasite, followed by *Ascaridia galli*. Also present were *Capillaria retusa* and *C. longicollis*. Cestodes were represented by *Davainea proglottina*, *Railletina cesticillus*, *R. echinobothrida*, *Choanotaenia infundibulum* and *Amoebotaenia sphenoides*. There was little difference between the infection rates from farms and small holdings but certain figures seem to show that hens were more frequently affected than cocks. P.A.C.

- 706—\*GIESSMANN, W., 1938.—“Beiträge zum Studium der Fuchstrichinose mit besonderer Berücksichtigung der Uebertragungsmöglichkeit der Fuchstrichine auf das Schwein.” Inaugural-Dissertation, Hannover.

- 707—HABERER, C., 1938.—“La strongylose gastrique du cheval: *Trichostrongylus axei* (Cobb).” Thèse, Alfort, 58 pp.

Haberer briefly discusses equine gastric strongylosis in all its aspects. He found *Trichostrongylus axei* in 18% of 82 horses at Brancion. In the section on life-history he states that development within the egg-shell requires about 15 days, and that complete development comprises 4 stages. B.G.P.

- 708—HEGNER, R., ROOT, F. M., AUGUSTINE, D. L. & HUFF, C. G., 1938.—“Parasitology, with special reference to man and domesticated animals.” New York & London, xxi+812 pp.

- 709—\*HOUEDEMER, E. F., 1938.—“Recherches de parasitologie comparée indochinoise.” Paris, 235 pp.

- 710—JOHANN, M., 1938.—“Über Trichinen im Allgemeinen, sowie über ihre Verbreitung unter den Füchsen der freien Wildbahn im Speziellen. (Auf Grund von Massenuntersuchungen im Kreise Sangerhausen).” Inaugural-Dissertation, Leipzig, 23 pp.

Johann describes the general life-history of *Trichinella* and discusses its propagation among foxes; the cysts in foxes are circular, but rats may be infected with trichinosed fox flesh, the *Trichinella* in foxes not being a separate species. V.D.V.S.

- 711—LAUTERWASSER, O., 1938.—“Das Blutbild bei Spul- und Bandwurmbefall von Hunden vor und nach der Entwurmung unter besonderer Berücksichtigung der eosinophilen Leukozyten.” Dissertation, München, 56 pp.

Lauterwasser has examined the blood picture of dogs infected with ascarids and with cestodes and has observed the changes following expulsion of the parasites. In both cases during infection there is an increase in polymorphs and eosinophiles, and immature forms of leucocytes are often present in the circulating blood. Following expulsion of the parasites there

\* Original not available for checking or abstracting.

is an immediate fall in the lymphocyte and eosinophile counts. This is especially marked after expulsion of cestodes. Neutrophiles increase. He discusses also the effect of a number of anthelmintics on the composition of the blood stream and notes also that very heavy helminthic infections may induce an eosinopenia in the circulating blood.

P.A.C.

- 712—MEYER, A., 1938.—“Klasse: Acanthocephala, Akanthozephalen, Kratzer.” In: Brohmer, P., Ehrmann, P. & Ulmer, G., “Die Tierwelt Mitteleuropas.” Leipzig, Bd. I, Liefg 6, 40 pp.

- 713—MÜLLER, F., 1938.—“Die Magen-Darmstrongylose des Allgäuer Jungrindes und ihre Behandlung.” Inaugural-Dissertation, München, 42 pp.

Müller's investigations show that, in wet years especially, gastrointestinal strongyles are responsible for serious economic loss amongst 6 to 12-months-old calves in both valley and hill pastures in the Bavarian Allgäu. According to rainfall and locality, the incidence varies from 5 to 90%, and the case mortality from 10 to 30%. The onset of the disease occurs in late summer and autumn. Müller gives 20 case-reports, and claims that satisfactory results follow the administration of 5 g. tablets of “Allegan,” a complex organic arsenate. The dose is 3 or 4 tablets according to age, pulverized and dissolved in 0.25 to 0.5 litres of warm water.

B.G.P.

- 714—\*PRESSLER, H., 1938.—“Zur Differentialdiagnose der Paratyphusknoten in der Leber der Kälber unter besonderer Berücksichtigung von Nematodenknötchen.” Inaugural-Dissertation, Berlin.

- 715—\*REBRASSIER, R. E., 1938.—“Diagnosis of parasites in animals.” Department of Veterinary Parasitology, College of Veterinary Medicine, Ohio State University, 65 pp.

- 716—RIDALA, V., 1938.—“Über das Vorkommen von Jungtierkrankheiten in Estland.” Protokolai, Baltijoi Valstybiu Veterinarijos Kongreso (III), Kaunas, 1937, pp. 81-96.

Included in Ridala's survey of diseases of young animals in Esthonia is an account of the post-mortem examination of 159 pigs, in which death was ascribed to *Strongyloides papillosus* in 16 cases, to *Ascaris* in 11, and to lungworms in 3. Among 18 fatalities in colts were 3 involving ascariasis, which disease also accounted for 2 out of 5 deaths in kittens. Of 33 deaths in chicks, 4 were ascribed to *Heterakis* and 1 to *Echinoparyphium*.

B.G.P.

- 717—SALISCH, H., 1938.—“Über das Verhalten der Jungtrichinen im Herzen.” Inaugural-Dissertation, Berlin, 34 pp.

*Trichinella* larvae enter the heart in the blood stream, and explore the musculature through the capillary walls, but do not wholly leave the capillaries. They do not endeavour to encyst but leave again in the blood stream, and cannot be found in the heart after 25 days. No dead larvae are found in the myocardium, and the cell infiltration observed is probably the result of general toxin production evoked by the destruction of larvae elsewhere in their migration.

V.D.V.S.

\* Original not available for checking or abstracting.

- 718—SCHUURMANS STEKHOVEN, jr., J. H. & TEUNISSEN, R. J. H., 1938.—“Nématodes libres terrestres.” In: “Exploration du Parc National Albert. Mission G. F. de Witte (1933-1935)”, Fasc. 22, Bruxelles, 229 pp.

Schuurmans Stekhoven & Teunissen report on the free-living nematodes, from soil samples preserved in 3% formalin, collected by the de Witte mission to the National Albert Park in the Belgian Congo. Part 1, pp. 1-136, deals with the systematics of the nematodes found and includes descriptions of one new genus and 27 new species. Pp. 137-160 consist of a discussion on the distribution of the nematodes in relation to soil type. Part 2, pp. 161-218, is made up of the following: (i) a study of various regions of the body in *Anaplectus granulosus*; (ii) observations on cellular constants, particularly in *A. granulosus*; (iii) the distribution of certain species of *Rhabditis* in relation to soil type, and (iv) the influence of parasitic infections of bacteria and sporozoa on the growth of the gonads. T.G.

- 719—SOUTHWELL, T. & KIRSHNER, A., 1938.—“A guide to veterinary parasitology and entomology for veterinary students and practitioners.” London, 2nd edit., xvi+176 pp.

- 720—\*STENDER, M., 1938.—“Ueber die Grundlagen für Immunisierungsversuche gegen *Trichinella spiralis* bei der weissen Maus.” Inaugural-Dissertation, Hannover.

- 721—\*TAHAR, H. M., 1938.—“Les helminthiases humaines et leur fréquence en Tunisie.” Paris.

- 722—\*TEPE, H., 1938.—“Kasuistischer Beitrag zur Epizootologie der Lungenwurmseuche des Rindes.” Inaugural-Dissertation, Hannover.

- 723 — Acta Conventus Tertii de Tropicis atque Malariae Morbis, Amsterdam, 1938.

- a. RODHAIN, J., 1938.—“La pathogénie des filarioses humaines.” 1, 205-217.
- b. GALLIARD, H., 1938.—“Recherches sur la spécificité de l'action pathogène de *Filaria malayi* Brug 1927.” 1, 218-227.
- c. GALLIARD, H., 1938.—“Recherches sur la transmission de *Filaria bancrofti* et *F. malayi* au Tonkin. (Note préliminaire).” 1, 228-229.
- d. BRUG, S. L., 1938.—“Efficiency of filaria-vectors.” 1, 230-238.
- e. FENG, L. C., 1938.—“The distribution and transmission of filariasis in China.” 1, 239-248.
- f. IYENGAR, M. O. T., 1938.—“Filariasis in India.” 1, 249-257.
- g. KHALIL, M., 1938.—“The life-history of *Wuchereria bancrofti* in Egypt, its pathogenicity and control, including a new theory to account for filarial periodicity and the mechanism of the pathological manifestations.” 1, 258-273.
- h. ZIEMANN, H., 1938.—“*Filaria loa*.” 1, 274-276.
- i. VOGEL, H., 1938.—“Krankheitsbilder und Bekämpfungsprobleme der Bilharziose in China.” 1, 432-437.

(723b) Galliard finds that in Tonkin the clinical manifestations due to *F. malayi* and *F. bancrofti* are specific for each parasite and that the location of the worms in the body of the host is very different in each case. In cases showing lesions of the urogenital organs *Mf. bancrofti* were invariably found. Where the lower limbs were affected microfilariae were not always present, but when present were always identified as *Mf. malayi*. J.J.C.B.

\* Original not available for checking or abstracting.



(723c) Galliard records preliminary results of experimental infections of mosquitoes with *F. bancrofti* and *F. malayi* in Tonkin. *Mansonioides indiana* was easily infected with *F. malayi* but no development was observed in *M. annulifera*. Proboscis infection was obtained in *Aedes aegypti* with *F. bancrofti*, and developmental stages in *A. albopictus*. No infection of any kind was obtained in *Armigeres obturbans*. *Culex vishnui* and *C. whitmorei* rarely bite man and are unlikely vectors. *Neocellia maculata* and *Pseudonyzomyia vaga* seem to be easily infected with *F. malayi* but so far infective larvae have not been found. Both *F. bancrofti* and *F. malayi* infect 90% of *Anopheles hyrcanus* var. *sinensis*. *Anopheles hyrcanus* seems to be the most important vector of filariasis in Tonkin and it occurs throughout the country. It is more efficient than *Culex fatigans* in transmitting *F. bancrofti* and the scarcity of *Mansonioides* makes it a very important carrier of *F. malayi*. J.J.C.B.

(723d) Brug investigated the mosquito vectors of *F. bancrofti* in the island of Kabaena, near Celebes, and of *F. malayi* in Kalawara. By means of artificial infections he found *Anopheles barbirostris* to be an ideal vector of *F. malayi* and *Culex vishnui* to be quite unimportant. Various species of *Culex*, *Anopheles* and *Aedes* were experimented with in Kabaena but none of these are really efficient vectors of *F. bancrofti*. To quote the author: "It seems as if *Filaria bancrofti* in the Island of Kabaena is still looking out for a really good carrier, has not yet found a such and is still experimenting with all kinds of mosquitoes". J.J.C.B.

(723e) Feng summarizes present knowledge of the distribution of filariasis in China and tabulates the mosquitoes implicated in the transmission of *Wuchereria bancrofti* and *Mf. malayi*. The relative importance of the different species of vectors in different parts of China is discussed. The most important carrier is *Anopheles hyrcanus* var. *sinensis*, which transmits both *Mf. bancrofti* and *Mf. malayi* throughout the country. *Mansonioides uniformis* also transmits *Mf. malayi*, while *Culex pipiens* var. *pallens* helps in transmitting *Mf. bancrofti* in Central China, and *C. fatigans* in South China. Filariasis due to both species of parasites is widely distributed in Central and South China but is more prevalent among the rural than the urban population. J.J.C.B.

(723f) Iyengar gives a brief general account of the incidence, transmission and control of filariasis in India, followed by a discussion on the relation of filarial infection to filarial disease based on recent investigations in Travancore. The interpretations of the tabulated results of studies on a population of nearly 79,000 offer an explanation for the steady increase in the filarial disease rate and the filarial endemicity rate in relation to increasing age without corresponding increase in the infection rate in the later ages. The view that filarial infection is a necessary precursor of filarial disease is supported. J.J.C.B.

(723g) Khalil advances a new theory to explain filarial periodicity, which is based on a number of facts, the most important being the situation of the adult worms in the body of the host. Thus, the nocturnal periodicity of *Mf. bancrofti* is related to the fact that the adults usually inhabit the lower parts of the body. In order to get into the blood stream the microfilariae, after being discharged by the adult females into the lower lymphatics, must pass upwards in the thoracic duct, and this is more easily effected at night

when the body is in a recumbent position and when the velocity of the chyle in the duct is greatest. In the case of *Loa loa*, the adult worms inhabit the upper parts of the body mainly. The flow of lymph from the upper limb lymphatics into the veins at the base of the neck is increased during the day by the greater muscular activity of the body and hence the microfilariae appear in greater numbers in the peripheral blood in the daytime. The microfilariae disappear from the peripheral blood by passing from the capillaries into the lymph spaces to the lymphatics. This is influenced by the resistance of the capillaries to the passage of large microfilariae such as *Mf. bancrofti* and *Mf. loa*. The non-periodicity of *Mf. bancrofti* in the South Sea Islands is explained by the fact that the adult worms occur in the upper as well as in the lower parts of the body. The latter part of this paper is devoted to a theory of thermotropism in adult filariae to account for their common occurrence in the spermatic cord and scrotum. J.J.C.B.

(723h) Ziemann discusses the longevity of *Filaria loa* and believes that this parasite may be implicated in tropical polymyositis in the Cameroons. J.J.C.B.

(723i) Vogel gives a brief account of bilharzia investigations in Chü-Hsien. He points out the relation between the incidence of the disease and the nature of the soil, and describes the principal clinical manifestations of disease some of which are illustrated by photographs. Methods of control are discussed. Laboratory observations on *Oncomelania* showed that these snails reach full growth in 4 months and become mature in 6 months, when mating begins. J.J.C.B.

#### 724—Congreso (X) Asociacion Argentina de Cirugia.

- a. ARCE, J. & LANARI, E. L., 1938 (?).—"Equinococosus pulmonar. Exposicion de patologia, anatomia patologica y radiologia." [Reprint 21 pp.]

#### 725—Congrès (71me) des Sociétés Savantes.

- a. JOYEUX, C., 1938.—"Recherches sur la *Ligule intestinale*." pp. 269-271.
- b. CARRÈRE, P., 1938.—"Recherches expérimentales et épidémiologiques sur les trématodes de quelques poissons marins." pp. 293-295.

(725a) Joyeux finds that *Ligula intestinalis* resembles *Diphyllbothrium* in that the posterior portion of the plerocercoid is lost before the adult worm develops; but in this case the loss occurs in the piscine second intermediary. Aquatic birds harbour the adult for only a few days, and after 20 to 30 days re-infection readily occurs—as many as 7 successive infections have been set up in a duck. Associated with this brief adult life, there is a marked development of genital rudiments in the plerocercoid. B.G.P.

(725b) Carrère has studied the trematode infestations of the fishes in the brackish and saline ponds of the Camargue. Mullet (*Mugil* sp.) from the ponds carry *Haploplanchnus pachysomus* as an intestinal parasite, and in the tissues around mouth and pharynx the metacercariae of a species of *Phagicola* (final hosts: dog, cat, rat, gull, duck and, in nature, *Ardea purpurea*). *Atherina mochon* transmits four larval trematodes, an acanthostomid and a gasterostomid (*Dolichoenterum lamirandi*) to carnivorous fishes, and *Cryptocotyle concava* and a species of *Pygidiodopsis* to mammals and

birds. The common eel, *Anguilla anguilla*, has an internal parasite, *Dero-pristis inflata*, whose intermediate host is the annelid, *Nereis dumerili*, and which can also reach maturity in the catfish, *Ameiurus catus*, and the frog, *Rana esculenta*.

E.M.S.

726—International Veterinary Congress (13th), Zurich-Interlaken, 1938.

- a. CHRISTIANSEN, M., 1938.—“Cestoden bei Säugetierwild, ihre Bedeutung und Bekämpfung.” 1, 623-632.
- b. CAMERON, T. W. M., 1938.—“Animal parasites of wild animals.” 1, 633-642.
- c. HALL, M. C., 1938.—“The relation between parasitic diseases of man and animals.” 1, 646-652.
- d. KRÁL, F., 1938.—“Die Beziehungen zwischen den parasitären Krankheiten des Menschen und der Tiere.” 1, 653-664.
- e. MÖNNIG, H. O., 1938.—“Pasture hygiene with respect to parasitic diseases.” 1, 666-671.
- f. DATTA, S. C. A., 1938.—“New researches on some helminthic diseases of India.” 1, 720-732.
- g. TAYLOR, E. L., 1938.—“Grazing hygiene with respect to parasitic diseases.” 1, 672-682.
- h. KOTLÁN, A., 1938.—“Der heutige Stand unserer Kenntnisse über immunbiologische Fragen bei der Trichinose.” 1, 688-698.
- i. MATERNOWSKA, I., 1938.—“Der Versuch einer Analyse der Intrakutanreaktion ‘I.K.R.’ bei Parasitenkrankheiten.” 1, 699-708.
- j. SCHOENAERS, F., 1938.—“Les réactions immunologiques dans les helminthiases intestinales.” 1, 709-717.

(726a) Discussing the cestode parasites of game mammals, Christiansen points out that the control of anoplocephalid diseases awaits further life-history studies. Among the larval tapeworms occurring in deer, “*Cysticercus cellulosae*” from roe-deer is almost certainly a mis-diagnosis for *C. tarandi*, adult in the dog. *C. pisiformis* has been found in 26.6% of rabbits examined in Denmark.

B.G.P.

(726b) In Canada 60% of the mammals, 79% of the water and shore birds, 18% of the land birds, and over 65% of fishes harbour metazoan parasites. The influence of natural and artificial segregation is discussed and the need of regional surveys is stressed.

R.T.L.

(726c) In this posthumous paper Hall points out that the neglected field of the parasitic diseases of man and of animals requires widely organized survey-work and a special study of control (based on epizootology as well as on epidemiology) for its further cultivation.

B.G.P.

(726d) Král's paper consists of a briefly annotated list of the protozoa, fungi, helminths and ectoparasites common to man and other animals.

B.G.P.

(726e) In discussing pasture hygiene versus parasitism, Mönnig leaves on one side such well-known factors as temperature, moisture, and overstocking, and concentrates his attention on such less appreciated factors as the following. Soil type may involve mineral deficiencies in the fodder leading to lowered resistance to parasites, and it also has a direct effect on larval stages especially through its texture: the sheep hookworm in South Africa is confined to the drier, sandier soils. Vegetation gives shade and conserves moisture, and it has frequently been shown at experimental stations that verminous infections are proportional to density of herbage.



Safe intervals between successive grazings of a pasture vary from 3 weeks to over 2 years according to circumstances. B.G.P.

(726f) Datta discusses recent research on helminthic diseases of equines and bovines in India. Those of schistosomic etiology referred to are: bovine nasal granuloma or "snoring disease," and persistent debility in equines, associated with enlarged liver, due to *Schistosoma indicum*. Bursati in horses is referred to and the habronemic theory of its etiology. The filarial diseases include equine lichen tropicus, a microfilarial pityriasis; *Parafilaria multipapillosa* causing "dourine-like plaques" in equines; "hump sore" of cattle caused by *Stephanofilaria assamensis*; periodic ophthalmia in the horse due to microfilaria. A case of microfilarial dermatitis in an old bullock is reported. J.W.G.L.

(726g) Taylor shows that the helminthiasis of grazing animals are due to overcrowding on man-made pastures, by which the rate of increase of infestation tends to vary as the square of the number of animals, as some function of the time during which the pasture is grazed, and inversely as the area. However, various "third factors" such as moisture, frost, amount and type of herbage, etc., intervene, and the bionomics of individual species of parasite have to be considered, so that it becomes necessary to estimate directly the actual store of infective material in a given field. Such estimates have shown that sheep pastures carry from 200 to 2,500 larvae per lb. of herbage, while in one horse paddock the value was 6,800 infective red-worm larvae per lb. (a horse grazing here would pick up half a million larvae per day). On the "larvae per lb." basis it is shown that to rest pastures may improve them by mere growth of herbage, without death of larvae: nitrate dressings assist this process. Other helpful measures are grazing by immune hosts, hay making, burning, ploughing, and (in some cases) the use of chemicals such as calcium cyanamide, copper sulphate, and earth-worm eradicators. B.G.P.

(726h) Kotlán considers the immunological responses of various hosts to infection with *Trichinella spiralis*. Susceptibility varies considerably, some hosts forming favourable sites for both adult and larval stages. Others put a check to a greater or less degree on the development of the larval stages. Infection induces the development of both antitoxins and precipitins, both of which can be demonstrated by suitable tests. It is possible to induce partial resistance passively by means of injections from the serum of infected animals. P.A.C.

(726i) Maternowska assumes that the intradermal reaction in helminthiasis exhibits two phases. The immediate reaction is the only one developing in association with intestinal parasites and is a group reaction. The delayed reaction only appears with those parasites that live in the tissues and are in intimate contact with the host. The reaction is usually specific for the parasite concerned. The immediate reaction may still occur after the expulsion of the parasites. P.A.C.

(726j) Schoenaers summarizes our knowledge of the immunological reactions produced in intestinal helminthiasis and comes to the conclusion that antibodies are only developed in those infections which have involved a larval migration through the tissues, whereby the parasite comes into close contact with the host tissues. P.A.C.

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## NOTE.

In all indexes the reference is to the serial numbers and not to the pages. In the Indexes of Authors and Subjects numbers in **bold type** indicate abstracts and numbers in Roman type refer to title-only entries.

In the Index of Authors, joint authors are separately listed. Thus, "Jones, A. & Brown, B." would appear also as "Brown, B. with Jones, A."

In the Index of Subjects, alphabetization is under the first word (e.g., "*Acer* sp." before *Acerina* sp."). Under the generic name of a helminth the following order is observed : papers on the genus as such ; papers on undefined species ; papers on new and defined species, e.g.,

*Capillaria*

— spp.

— *aerophila*

— *amarali* n. sp.

In cross-entries under names of hosts, the specific names of new species of helminths are omitted. *Anthelmintics* are listed under that word and also under name of the parasite or disease.

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## CORRIGENDA.

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43b (Title) For "pp. 3-8" read "67-72"

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167a (Abstract) Line 2 For "*Ceryle raddis leucomanara*" read "*Ceryle rudis leucomelanura*"

388c (Abstract) Line 5 For "*Ceryle radis leucomalanara*" read "*Ceryle rudis leucomelanura*"

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